Again on why. But why?*

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This paper deals with the wh-word dlaczego ('why') in Polish and examines its structural properties in embedded non-finite environments. It is argued that why possesses two different readings corresponding to two different syntactic positions: Whereas the reason why externally merges on the right edge of the expanded CP, viz. in [Spec,ReasonP] and then moves to a higher position in order to check some formal features, the purpose why appears base-generated in [Spec,vP] and internally merges in a higher FP below NegP. Arguments provided for these two distinct positions come from sensitivity to negation, agentivity restrictions and multiple wh-questions.

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1 Embedded Non-Finite Questions

As Sabel (2005: 96, 2006: 249) points out, languages differ with respect whether they allow a *wh*-movement to [Spec,CP] in infinitives. If they do (like English and Russian), they also have the option of filling the C-system of this infinitive with a base-generated overt element. If a language has a defective infinitival C-system (like German and Mainland Scandinavian languages) and the movement does not take place, the option of base-generation of an overt element should be ruled out. English and Polish belong to the first group admitting the *wh*-movement to [Spec,CP] in embedded non-finite questions (henceforth ENQs) ¹:

- (1) a. I know [CP][Spec,CP] what to do with all those forks]].
 - b. Wiem, [CP [Spec,CP co kupić]] know_{1SG} what buy_{INF} 'I know what to buy.'

Notice, however, that Polish and English differ in one main respect that cannot be captured by Sabel's generalization: While English ENQs cannot be introduced by why^2 (see Bhatt 2006: 107, Huddleston & Pullum 2002: 872, Quirk et al. 1985: 839, Shlonsky & Soare 2011: 653, among many others), their Polish counterparts can:

- (2) a. *She wonders [why to study].
 - b. Wielu kierowców zastanawia się, many drivers wonder [dlaczego zmieniać ogumienie]. why change_{INF} tires

¹ The following abbreviations are used in this paper: 1/2/3 – 1st/2nd/3rd person, ACC – accusative, COND – conditional mood, DAT – dative, INF – infinitive, *l*-PTCP – *l*-participle (inflected for number and gender), M – masculine, NEG – negation, PL – plural, REFL – reflexive, SG – singular, VIR – virile. The Polish data has been extracted mainly from the National Corpus of Polish abbreviated here as NKJP (http://www.nkjp.pl).

² Cross-linguistically it is not surprising that *why* differs from other *wh*-operators. Kiss (1988: 249), for example, observes that in Hungarian all *wh*-phrases other than *miért* ('why') occupy a preverbal identification focus position. Buell (2011), in turn, illustrates for Zulu that *ngani* ('why') in contrast to other *wh*-phrases is base-generated in the CP field.

'Many drivers wonder why they should change tires.' (NKJP, *Gazeta Poznańska*, 23/3/2006)

Similar situation holds for other Slavic languages, too:

- c. Czech (Radek Šimík, p.c.)
 Lidé se ptali, [proč čekat až do půlnoci]
 people REFL ask why wait_{INF} until midnight
 'People were asking why they should wait until midnight.'
- d. Russian (Olga Steriopolo, p.c.)

 Mnogie studenty ne ponimali, [začem delat' eto zadanie]

 many students NEG understood why do_{INF} this task

 'Many students didn't understand why they should do this task.'

In what follows, I will examine (2b) in more detail and show that *dlaczego* in Polish ENQs possesses two readings (reason- and purpose-reading) related to two different syntactic positions. In section 2, I will briefly outline previous accounts devoted to *why* and its distinct merge positions with respect to other *wh*-operators. As it will turn out, none of these approaches can fully account for Polish facts indicating that a new unifying account is needed. Section 3 presents a new analysis of *why* supporting den Dikken's (2009) and Šimík's (2011) view that *wh*-words does not always refer to [Spec,CP] or to a [Spec,FP] in the extended CP domain. It also shows how the analysis successfully predicts the range of data discussed. Section 4 sheds new light on an old problem: sluicing. Finally, section 5 concludes the paper.

2 Previous Accounts

As pointed out in the previous section, Polish ENQs in contrast to the English ones can be introduced by the wh-word why. At first glance, one

³ Interestingly enough, (2b) not only has two different readings with respect to the interpretation of the *wh*-word *dlaczego*, as I will show below, but it also can be interpreted both episodically (*Many drivers are wondering why they should change the tries*) and habitually (*Many drivers wonder why they should change tires*). Due to the lack of space, I won't be able to dwell upon the latter dimension, but for more details and their syntactic differences see Barrie (2007).

could assume, following Collins (1991), that *why* in Polish does not differ from other *wh*-phrases in being endowed with features triggering its movement to the same position or, to be more precise, to [Spec,Wh]⁴. As I will illustrate below, however, such an assumption fails not only to cover available readings of *dlaczego* in Polish, but also to explain their distinct syntactic behaviors. Before I elaborate on my own account, two alternative approaches deserve to be presented.

2.1 Rizzi (2001)

To my knowledge, Rizzi (2001) is one of the first who explicitly highlights the heterogeneous behavior of *perché* ('why') in Italian. Firstly, in contrast to other canonical *wh*-phrases that require I-to-C movement, *perché* does not require the finite verb to move as high as C (all Italian examples are taken from Rizzi 2001):

(3) a. *Dove Gianni [IP è [VP andato]]? where Gianni be_{3SG} gone 'Where Gianni went?'

As Collins (1991: 37; fn. 9) admits himself, however, (ia) appears to be marginal and he doesn't provide any explanation for why it should be so. Roumyana Pancheva (pers. comm.) pointed out to me that the oddness of English ENQs embedded under *why* may be weakened by introducing a negation operator in the embedded clause. This prediction seems to be borne out by the following internet examples:

- (ii) a. I wonder why not to create a few small documents.
 - b. DES fits that category and I hope you know why not to use it.
 - c. You could consider why not compose your ideal solo.

Note, however, that I wasn't able to find any appropriate corpus examples underpinning this view. Furthermore, most native speakers of American English to whom I talked still found the examples illustrated in (ii) marginal and some of them even classified them as 'very bad' or 'weird'. I leave this issue for further research.

⁴ Collins (1991) assumes basically that *why* in English moves to [Spec,CP] from a lower position that in turn can be either associated with IP or with VP. In order to highlight the contrast between *why* and *how come*, he provides the following minimal pair (p. 37, examples 12 and 13):

⁽i) a. ?I don't know why to leave. b. **I don't know how come to leave.

- b. Dove [CP è [IP Gianni [VP andato]]]? where where be_{3SG} Gianni gone 'Where went Gianni?'
- c. Perché Gianni [IP è [VP venuto]]? why why Gianni be_{3SG} left 'Why Gianni has left?'

Secondly, whereas classical *wh*-words cannot co-occur with focus phrases, *perché* can. Rizzi (2001) points out that the word order is fixed though, indicating that *perché* always has to precede focused elements:

- (4) a. *A chi QUESTO hanno detto (non qualcos' altro)? to whom THIS have_{3PL} said not something else 'To whom THIS they said (not something else)?'
 - b. Perché QUESTO avremmo dovuto dirgli, non qualcos' altro? why THIS have_{IPL.COND} should said.him not something else 'Why THIS we should have said to him, not something else?'

The differences outlined above suggest that a distinct position for *perché* should be postulated in the left periphery. This is also the way how Rizzi (2001) proceeds. Elaborating on his previous work (Rizzi 1997), he proposes the following cartography of the left periphery

(5) Force (Top*) Int (Top*) Foc (Top*) Wh IP

where *Int* is a functional projection in which *perché* is supposed to be merged. The syntactic separation of *why* from other *wh*-words and its higher merge position neatly account for the non-availability of focused elements preceded by other *wh*-phrases, in addition to some other crosslinguistic consequences. The proposed structure convincingly accounts for why English ENQs cannot be introduced by *why*: "If *why* is merged high (at IntP) and infinitival clauses contain only the lower (right) portion of the expanded CP, then this explains why *why* is not licit in infinitival clauses - there is no position for it" (Barrie 2007: 273). On the other hand, if *why* is supposed to be base-generated in Spec,IntP and ENQs are in principle not equipped with IntP, then ENQs introduced by

why in Slavic languages (cf. 2b-d) appear unexpected. One possible solution could be that *dlaczego* like other canonical *wh*-phrases in Polish, but unlike in English, moves to [Spec,FocP] (cf. Bošković 2002 and Lubańska 2005 for cross-linguistic evidence showing that *wh*-movement is focus-driven). If this analysis would be on the right track, other focus phrases following *dlaczego* should be disallowed. As (6) shows, this prediction is not borne out though:

(6) Wiesz, dlaczego TO mamy jej powiedzieć? know_{2SG} why THIS have_{1PL} her_{DAT} say_{INF} 'Do you know why we should say THIS to her?'

[Spec,WhP] would not be a better target position either. Since there is no position for focus elements, (6) should be ruled out⁵. Given that neither

But even if we assume following Haider (2009) that German has neither νP nor TP, this problem still holds for Dutch:

(ii) [Spec,FocP Wat [x heb [Spec,TP je waarom [VP gedaan?]]]] what have2SG you why done 'For what reason did you do it?' (Tonjes Veenstra, pers. comm.)

One possible solution would be to adopt the account advocated by Shlonsky & Soare (2011) and argue that *waarom* in (ii) stays in situ, in a functional projection in the left periphery, or, to be more precise, in [Spec,ReasonP] (see section 2.2.). The first *wh*-phrase *wat* would then internally merge in [Spec,FocP], and the subject would occupy [Spec,TopP], requiring the matrix verb to raise as high as Fin head. This is also the way how S&S (2011: 658; ex. 18a,b) deal with multiple *wh*-questions in Romanian:

⁵ Another problem is related to multiple *wh*-questions. If one assumes that in West-Germanic languages exhibiting V-to-T-to-C movement the first *wh*-phrase internally merges in [Spec,FocP], the finite matrix verb moves as a verbal head to one of the functional projections in the expanded CP domain, and the subject is associated with [Spec,TP], then there is no position for *why* in CP. In other words, if *why* is merged in IntP, i.e. higher than other *wh*-words, (i) appears unexpected:

⁽i) [Spec,FocP Wer [x ist [TP warum [VP gekommen]]]]? who is why come 'Who came for what reason?' (Stepanov & Tsai 2008: 591; ex. 5)

WhP nor FocP can attract *dlaczego*, the only remaining option goes back to Rizzi's (2001) IntP. And this is the idea that I am going to pursue and continue here. But even if this turns out to be a correct take, one more problem arises. (2a) – repeated here as (7) for convenience – exhibits two different readings:

(7) Wielu kierowców zastanawia się, many drivers wonder [ENO dlaczego zmieniać ogumienie].

why change_{INF} tires

- a. 'Many drivers wonder what is the reason for changing tires.'
- b. 'Many drivers wonder what is the purpose of changing tires.'

Dlaczego can be both interpreted as a reason *wh*-phrase and as a purpose *wh*-phrase⁶. Now, it remains unclear how to cope with the ambivalent

(iii) [Spec,FocP/WhP Cine [Spec,ReasonP de ce [FinP [Fin a [VP plecat]]]]]? who why has left 'Who left and why'

(iv) *De ce cine a plecat?

I thank Wayles Browne who drew my attention to this problem.

⁶ According to Stepanov & Tsai (2008: 591; fn. 3) there are different strategies in distinguishing between reason and purpose wh-phrases: "In Latvian, the two varieties of why are distinguished with accentuation: $par k \dot{u}$ 'why' vs. $par k \dot{u}$ 'for what'. As Ilhan Cagri (p.c.) points out to us, Turkish distinguishes the two varieties of why morphologically, i.e., neden (= ne 'what' + den 'ablative case') vs. nicin (= ne 'what' + icin 'for'). Russian and Polish lexicalize the distinction." Although Polish possesses two different wh-phrases dlaczego ('for what reason') and po co ('for what purpose'), dlaczego can be used in these two different ways too. I have no explanation for why it is so. Furthermore, it is interesting to stress that czego - an abbreviated use of dlaczego mainly employed in colloquial Polish - displays only the reason reading:

(i) Wielu kierowców zastanawia się many drivers wonder czego zmieniać ogumienie why change_{INF} tires_{ACC}

- a. 'Many drivers wonder what is the reason for changing tires.'
- b. *'Many drivers wonder what is the purpose of changing tires.'

Besides czego, in colloquial Polish the wh-phrase co ('what') can be employed as why:

behavior of *dlaczego* in (7) when it should occupy a single syntactic position. For the time being, I assume that *dlaczego* moves to (and is not base-generated in) [Spec,IntP] from a lower position within the CP field, iff *dlaczego* has a reason interpretation. Its base-generation position in turn is associated with the functional projection ReasonP which Shlonsky & Soare (2011) have introduced and on which I will elaborate in more detail in the next subsection.

2.2 Shlonsky & Soare (2011)

Another more elaborated cartographic approach to wh-phrases has been proposed by Shlonsky & Soare (2011) (= S&S) who mainly claim that "why (and its synonyms in some other languages) is externally merged as specifier of a dedicated functional projection – labeled ReasonP – configured above negation and adverbials" (p. 653):

(8) ForceP IntP TopP FocP WhP ReasonP TP NegP

The base-generation position of why in [Spec,ReasonP] on the right edge of the left periphery, i.e. below Rizzi's (2001) IntP but above NegP, provides a striking explanatory power for different wh-configurations. Primarily, it still makes the prediction that ENQs in English cannot be introduced by why: since canonical wh-phrases interact with Wh⁰, whilst why interacts with Int⁰, why appears not capable of satisfying the featural requirements of Wh⁰. Thus, Barrie's (2007) explanation remains valid. What Rizzi (2001) and S&S (2011) have in common is that both camps have why merge in the CP domain. The only difference pertains to the

(ii) Co się gapisz?!
what REFL stare2SG
'Why are you starring at (me)?!'

Remarkably, this use of co is barred from ENQs:

(iii) *Wielu kierowców zastanawia się many drivers wonder co zmieniać ogumienie what change_{INF} tires_{ACC}

It remains to be investigated in more detail to what extent *czego* and *co* differ from *dlaczego*. I thank Radek Šimík who brought my attention to this issue.

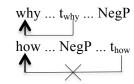
(S&S 2011: 655; ex. 12)

base-generation position of *why*. Whereas in Rizzi's (2001) view *perché* ought to be base-generated in [Spec,IntP], S&S (2011) place *why*s lower, in [Spec,ReasonP] from where they can move to [Spec,IntP]. And this is what mainly happens in finite root questions like in (9a):

- (9) Why did you ask her to resign?
 - a. short construal: What is the reason x, such that for x, you asked her to resign? e.g.: Because I didn't want to just tell her.
 - b. long construal: What is the reason x, such that you asked her to resign for that particular reason x? e.g.: *I asked her to resign because of her health, not because of her intelligence* ...

Depending on the target position of why, the question in (9) can be interpreted in two different ways. Without violating Rizzi's (2006) Criterial Freezing (= a phrase meeting a criterion is frozen in place) and in order to obtain either construal interpretation, S&S (2011) introduce ReasonP. If in (9) the speaker is asking the addressee for the reason of his saying something (= short construal), why moves within CP, i.e. from [Spec,ReasonP] to [Spec,IntP] and it never crosses a CP boundary. It leaves a trace in its base position determining the lower scope interpretation. On the other hand, if the speaker is asking the addressee for the reason of her resigning (= long construal), why moves from a lower position in the embedded clause, crosses a CP boundary and ends up being merged in [Spec,WhP] or in [Spec,FocP] (building on Rizzi's 2001 assumptions). Such an extension of the left periphery also illustrates that why, unlike other wh-phrases, is not sensitive to negation (10a,b are taken from S&S 2011: 656-7; ex. 14-15):

(10) a. Why didn't Geraldine fix her bike?



b. *How didn't Geraldine fix her bike?

Note, however, that the cartography proposed in (8) does not capture all facts and it runs into problems as soon as Polish *dlaczego* is taken into account. More specifically, if *dlaczego* in (7) is analyzed as a purpose *wh*-word, it must be below NegP (be it its base-generation or criterial

position). The reason for such a lower position is that the purposive reading of *dlaczego* disappears as negation is embedded. The reason reading, in turn, remains⁷:

(7') Wielu kierowców zastanawia się,

many drivers wonder

[ENQ dlaczego nie zmieniać ogumienia].

why NEG change_{INF} tires

- a. 'Many drivers wonder what is the reason of not changing the tires (in their cars).'
- b. *'Many drivers wonder what is the purpose of not changing the tires (in their cars).'

This contrast illustrates that purpose *dlaczego* does not outscope negation, whereas its reason counterpart does (irrespective of whether it is its base-generation or target position):

(11) a. reason *dlaczego*: $why \dots t_{why} \dots NegP$

b. purpose *dlaczego*: why ... NegP... t_{why}

This asymmetry also holds in construals in which *dlaczego* is extracted out of an infinitival clause. Again, if the negation does not intervene, both readings are available:

(i) Warum hast du die Reifen nicht gewechselt? why have_{2SG} you the tires NEG changed 'Why did you not change the tires?'

(ii) ??Wozu hast du die Reifen nicht gewechselt?
for what purpose have_{2SG} you the tires NEG changed

Whereas warum, an inherent reason wh-phrase, and a negation operator can co-occur without any problems, wozu ('for what purpose') appears much more restricted.

⁷ Andreas Haida (pers. comm.) pointed out to me that a parallel behavior can be observed in German, a language prohibiting ENQs in general, in embedded finite clauses:

(12) Dlaczego kierowcy chcą zmieniać ogumienie? why drivers want change_{INF} tires 'Why do drivers want to change tires?' reason dlaczego: +/purpose dlaczego: +

If the negation comes into play, the purpose reading of why disappears⁸:

(12') Dlaczego kierowcy nie chcą zmieniać ogumienia? why drivers NEG want change_{INF} tires 'Why do drivers not want to change tires?' reason dlaczego: +/ purpose dlaczego: -

In (12') *nie* occurs in the main clause. But nothing changes if it appears on the embedded verb. The purpose reading of *dlaczego* is also absent:

(12") Dlaczego kierowcy chcą nie zmieniać ogumienia? why drivers want NEG change_{INF} tires 'Why do drivers want to not change tires?' reason dlaczego: + / purpose dlaczego: -

An anonymous reviewer raises the question of how *dlaczego* behaves in Main Clause Infinitives with an expletive negation:

(13) Dlaczego jej nie odwiedzić? why her NEG visit_{INF} 'Why not to visit her?'

If negation operators disambiguate the reading of *dlaczego*, it is expected that only a reason interpretation should be available. And again, since *dlaczego* in (13) cannot be replaced by *po co*, a genuinely purposive *wh*word, this prediction is borne out:

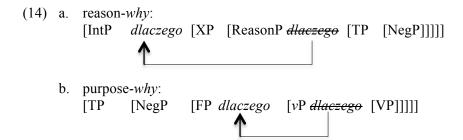
(13') *Po co jej nie odwiedzić?

⁸ I would like to thank one of the anonymous abstract reviewers for drawing my attention to this contrast. For a more detailed account of *wh*-extraction out of different types of complement clauses in Polish see Witkoś (1995).

This contrasts support the proposal to have reason *why* merge above NegP. In next section, I will show what exact syntactic positions of *dlaczego* in (7) are, and provide more evidence underpinning their different base-generation positions.

3 Towards a Unifying Account

Based on what we have seen so far, I argue that Polish ENQs introduced by the *wh*-operator *dlaczego* exhibit the two following patterns:



If *dlaczego* is interpreted as a reason *wh*-word, it externally merges on the right edge of the left periphery or to be more precise in S&S's (2011) [Spec,ReasonP] and then it moves to Rizzi's (2001) [Spec,IntP]⁹. ENQs are thus CPs spliced at IntP. It also means that reason *why* moves only within CP. On the other hand, if *dlaczego* is analyzed as a purpose *wh*-word, it externally merges within the VP domain and moves to a higher position (abbreviated in 14b as FP) below NegP, indicating that purpose ENQs in Polish are *v*Ps¹⁰ (cf. Kratzer 1996 for the notional character of

⁹ This view also patterns with the one presented in Ko (2005) who elaborately shows that why externally merges in the CP domain in wh-in-situ languages (Japanese and Korean) as well.

¹⁰ Tsai (2008) makes similar observations with respect to different *whys* in Chinese and Squliq Atayal (a Formosan language). He states that reason *wh*-words are sentential operators placed in the left periphery, while purpose *wh*-words are analyzed as *v*P-modifiers. Starke (2001: 29-36) shows that English *wh*-phrases can be ambiguous too. As for *why*, he distinguishes between a motivation and a cause interpretation and claims that the cause *why* cannot move at all and is base-generated in the left periphery of the clause. The availability of two different *whys* in English appears evident in (i) (taken from Starke 2001: 30; ex. 75):

subjects and their position in syntax). As it has been illustrated above, the negation in Polish ENQs disambiguates the reading of *dlaczego* to the extent that the purpose reading disappears (but see also section 4.2.). In what follows, I will provide more evidence supporting the view that *dlaczego* ENQs must be *v*Ps.

3.1. Agentivity restrictions

In order to determine syntactic positions of $za\check{c}em$ ('for which purpose') and $po\check{c}emu$ ('for which reason') in Russian, Stepanov & Tsai (2008: 619ff.) examine their occurrences with different verb classes non-requiring any agentive subjects. As it turns out, whereas $po\check{c}emu$ is compatible with unaccusative verbs, experiencer verbs, unergative sentient verbs, weather verbs and passive, $za\check{c}em$ does not go along with any of these constellations. Now, if dlaczego in Polish is ambiguous between a reason and a purpose interpretation, its purpose reading, like Russian $za\check{c}em$, is expected to be barred from non-agentive contexts. And this prediction is indeed borne out (where reason- $why = why^R$ and purpose- $why = why^R$):

- (15) unaccusative verbs (*spadać* 'fall'): *Dlaczego ta książka spadła na podłogę?*why^R/*why^P this book fell on floor

 'Why did this book fall on the floor?'
- (16) experiencer verbs (kochać 'love'):

 Dlaczego Joanna kocha tak książki?

 why^R/*why^P Joanna loves so books

 'Why does Joanna love books so much?'

⁽i) A: Sissy woke up early in order to see the sunrise because she needed some comforting

B: Why did she wake up early?

⁻ In order to see the sunrise.

 $[\]hbox{-} \textit{Because she needed some comforting}.$

- (17) unergative sentient verb (popłakać się 'cry'):

 Dlaczego Krzysiu się popłakał?¹¹

 why^R/*why^P Krzysiu cried_{3SG}

 'Why did Krzysiu cry?'
- (18) weather verbs (*ściemniać się* 'get dark'): *Dlaczego się ściemnia?*why^R/*why^P gets dark

 'Why is it getting dark?'
- (19) passive:

 Dlaczego Krzysiu został rozstrzelany?

 **why^R/*why^P Krzysiu was shot

 'Why was Krzysiu shot dead?'

The examples given in (15)-(19) provide strong evidence that purpose dlaczego ought to be associated with vP.

3.2. Multiple wh-questions

Another indirect argument illustrating a lower position of purpose *dlaczego* comes from multiple *wh*-questions. Lubańska (2005) claims that all *wh*-phrases in Polish multiple *wh*-questions adjoin to IP. Citko (1998) in turn postulates the functional projection (Op)erator Phrase

(i) A: Wozu hat das Kind geweint?
 for what purpose has the child cried
 'Why did the child cry?'
 B: Um einen Lutscher zu bekommen.
 in order a sucker to get_{INF}
 'In order to get a sucker.'

Notice that (17) in Polish can be answered this way too:

A: Dlaczego Krzysiu się popłkał?
B: Aby dostać lizaka.
in order get_{INF} sucker_{ACC}

At this moment, I have no explanation for why this reading appears appropriate here.

¹¹ Andreas Haida (pers. comm.) pointed out to me that it is possible in German to get a purpose reading with *weinen* ('cry') and the *wh*-phrase *wozu* ('for what purpose'):

which is located directly below CP and which can trigger a wh-movement. According to the latter account, the first wh-phrase moves to [Spec,CP] while the remaining ones move to [Spec,OpP] to check the Op features. What both approaches have in common is that the second and each next wh-word must be located below CP:

(20) Kto do kogo po co dzwonił? who to whom for what purpose called 'Who called whom and why?'

For the time being, we put the target position of the first *wh*-word aside. Now, keeping in mind the fact that reason *dlaczego* is associated only with CP, whereas its purpose counterpart is much lower in the structure (be it its base-generation or target position), we should be able to disambiguate it by replacing *po co* in (20) by *dlaczego*:

(20') Kto do kogo dlaczego dzwonił? who to whom ?why^R/why^P called

As expected, it appears very difficult to obtain an appropriate reason interpretation. Even if we go further and replace *dlaczego* by the lexical phrase *z jakiego powodu* ('for which reason'), it still has a strong purpose reading:

(21) Kto do kogo z jakiego powodu dzwonił?
who to whom for which reason called
'Who called whom and what was the ?reason/purpose for/of it?'

The data presented above strongly suggest that *dlaczego* in Polish occupies two distinct syntactic positions¹². If purpose *dlaczego* in fact

Remarkably, the second why-operator can be replaced by po co ('for what purpose'):

¹² If *dlaczego* can merge in two distinct positions, it should be possible to get two *why*s in one sentence. Note, however, that this is not the case:

⁽i) *Kto dlaczego i dlaczego dzwonił? who why and why called

merges very low in the structure, its position entails some theoretical consequences on which I will dwell in next section.

4 Theoretical Consequences: Sluicing

According to Merchant (2001) sluicing is a syntactic phenomenon that is triggered by an ellipsis feature (E-feature) on a C⁰ head. Its presence in English, for instance, is linked to uninterpretable strong [+wh, +Q] features which boils down to the fact that sluicing in general is restricted only to interrogative CP-complements (but see also van Craenenbroeck & Lipták 2006 for a special kind of sluicing in Hungarian relative clauses). In other words, only complements of the C⁰ head equipped with the feature set [+wh, +Q] can be elided. Now, based on what we can infer from previous sections, sluicing should be able to disambiguate between two readings of *dlaczego* in Polish ENQs. If the elided material is only associated with the CP, a purpose reading of *dlaczego* is expected not to occur. Note, however, that this is not the case:

(22) Wielu kierowców zastanawia się, many drivers wonder jak zmieniać ogumienie i dlaczego zmieniać ogumienie how change_{INF} tires and why change_{INF} tires 'Many drivers wonder how to change the tires and what the reason for this is/and what the purpose of this is.'

Unexpectedly, a reason as well as a purpose interpretation is available in (22), indicating that sluicing must be extended to interrogative ν P-

It also works with the first why-word:

(iii) Kto po co i dlaczego dzwonił?

At this moment, I have no explanation for this constraint. I thank Małgorzata Szajbel-Keck who drew my attention to this problem.

⁽ii) Kto dlaczego i po co dzwonił?

complements as well¹³. Main evidence for this comes from the fact that the purpose reading of *dlaczego* can be replaced by its lexical counterpart *po co* ('for what purpose'):

(22') Wielu kierowców zastanawia się,
many drivers wonder
jak zmieniać ogumienie i po co.
how change_{INF} tires and for what purpose
'Many drivers wonder how to change the tires and what the
purpose of this is/*and what the reason for this is.'

This is also in concord with Šimík (2011: 204-212) who elaborately shows that modal existential wh-constructions¹⁴ exhibiting short wh-movement and having vP size can be elided as well. In result, sluicing also applies in environments in which a wh-word is not necessarily in a relationship with the interrogative C^0 head, contrary to Merchant (2001).

5 Conclusions

In this paper, I have demonstrated that embedded infinitival questions in Polish can be headed by the *wh*-phrase *dlaczego* ('why'). To my best knowledge, this construction - probably due to its absence in the English infinitival system - has so far gone unnoticed in the literature on embedded non-finite questions. I have argued that *dlaczego* displays two distinct readings (reason vs. purpose), corresponding to two different syntactic positions. Whereas reason *why* is solely associated with the CP

 $^{^{13}}$ An anonymous reviewer points out that both reason and purpose *why*s move from different positions to [Spec,CP] in overt syntax, suggesting that there is no difference between them in sluicing. As the data presented above indicate, the purpose *dlaczego* cannot move as high as [Spec,CP] though. The sensitivity to negation and agentivity restrictions that are associated with the T and ν layers respectively prevent it to move so high. The reviewer emphasizes that there would be a difference if one *dlaczego* always moved to [Spec,CP] and the other *dlaczego* only to [Spec, ν P]. But so far I could not find any evidence underpinning the view that purpose *why* moves to [Spec,CP]. Quite the opposite, it is banned in C environments.

¹⁴ According to Šimík (2011) modal existential *wh*-constructions cannot be entertained as ENQs, nor as one of their subtypes. They function rather as special type of an A-bar construction, i.e. a syntactic tree containing an operator-variable dependency (for a detailed explanation see chap. 3 in Šimík 2011).

field, its purpose counterpart appears to be strongly connected to the VP domain and its movement to a higher position does not cross NegP. In this connection, the question arises why Polish *dlaczego* exhibits the two readings even though it also lexicalizes this semantic distinction: *dlaczego* (reason) vs. *po co* (purpose). It would be also interesting to see to what extent purpose *dlaczego* and its lexical counterpart *po co* ('for what purpose') differ from each other. I leave this issue for further research.

References

- Barrie, Michael. 2007. Control and wh-infinitivals. In New Horizons in the Analysis of Control and Raising, ed. Davies William & Stanley Dubinsky, 263-279. Dordrecht: Springer.
- Bošković, Željko. 2002. On multiple *wh*-fronting. *Linguistic Inquiry* 33: 351-383.
- Buell, Leston Chandler. 2011. Zulu *ngani* 'why': Postverbal and yet in CP. *Lingua* 121: 805-821.
- Citko, Barbara. 1998. On multiple *wh*-movement in Slavic. In *Formal Approaches to Slavic Linguistics: the Connecticut Meeting* ed. Željko Bošković, Steven Franks & William Snyder, 97-114. Ann Arbor, MI: Michigan Slavic Publications.
- Collins, Chris. 1991. Why and how come. In *More Papers on Whmovement* ed. by Lisa L.S. Cheng & Hamida Demirdache, 31-45. Cambridge, MA: MIT, MIT Working Papers in Linguistics.
- Craenenbroeck, Jeroen van & Anikó Lipták. 2006. The Crosslinguistic Syntax of Sluicing: Evidence from Hungarian Relatives. *Syntax* 9: 248-274.
- Den Dikken, Marcel. 2009. Arguments for successive-cyclic movement through SpecCP. A critical review. *Linguistic Variation Yearbook* 9: 89-126.
- Haider, Hubert. 2009. *The Syntax of German*. Cambridge: Cambridge University Press.
- Huddleston, Rodney & Geoffrey Pullum. 2002. *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.
- Kiss, Katalin É. 1988. Identificational focus versus information focus. *Language* 74: 245-273.

- Ko, Heejeong. 2005. Syntax of *Why*-in situ: Merge into [Spec, CP] in the overt syntax. *Natural Language and Linguistic Theory* 23: 867-916.
- Kratzer, Angelika. 1996. Severing the external argument from its verb. In *Phrase Structure and the Lexicon* ed. Johan Rooryck & Laurie Zaring, 109-137. Dordrecht: Kluwer.
- Lubańska, Maja. 2005. Focus on wh-questions. Frankfurt a.M.: Peter Lang.
- Merchant, Jason. 2001. The syntax of silence. Sluicing, islands and the theory of ellipsis. Oxford: Oxford University Press.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech & Jan Svartvik. 1985. *A Comprehensive Grammar of the English Language*. London: Longman.
- Rizzi, Luigi. 1997. The Fine Structure of the Left Periphery. In *Elements of Grammar: Handbook of Generative Syntax* ed. Liliane Haegeman, 281-337. Dordrecht: Kluwer.
- Rizzi, Luigi. 2001. On the Position "Int(errogative)" in the Left Periphery of the Clause. In *Current Studies in Italian Syntax: Essays Offered to Lorenzo Renzi* ed. Guglielmo Cinque & Giampaolo Salvi, 287-295. Amsterdam: Elsevier.
- Rizzi, Luigi. 2006. On the Form of Chains: Criterial Positions and ECP Effects. In *Wh*-Movement: Moving On ed. Lisa Lai-Shen Cheng & Norbert Corver, 97-134. Cambridge, MA: MIT Press.
- Sabel, Joachim. 2005. Infinitivische Frage- und Relativsätze im Deutschen und in anderen europäischen Sprachen. In *Der Infinitiv im Deutschen* ed. Jean-Francois Marillier & Claire Rozier, 83-102. Tübingen: Stauffenburg.
- Sabel, Joachim. 2006. Impossible Infinitival Interrogatives and Relatives. In: Form, Structure, and Grammar. A Festschrift Presented to Günther Grewendorf on Occasion of his 60th Birthday ed. Patrick Brandt & Eric Fuß, 242-254. Berlin: Akademie Verlag.
- Shlonsky, Ur & Gabriela Soare. 2011. Where's "Why"? *Linguistic Inquiry* 42: 651-669.
- Šimík, Radek. 2011. *Modal Existential* Wh-constructions. PhD thesis, Rijksuniversiteit Groningen.
- Starke, Michal. 2001. *Move dissolves into merge: A theory of locality*. PhD thesis, University of Geneva.

Stepanov, Arthur & Wei-Tien Dylan Tsai. 2008. Cartography and Licensing of *Wh*-adjuncts: A Cross-linguistic Perspective. *Natural Language and Linguistic Theory* 26: 589-638.

Tsai, Wei-Tien Dylan. 2008. Left periphery and *how-why* alternations. *Journal of East Asian Linguistics* 17: 83-115.

Wilder, Chris. 2013. Why don't you be an imperative? Talk and handout delivered at ZAS in Berlin on June 20th.

Witkoś, Jacek. 1995. *Wh*-extraction from clausal complements in Polish: A minimality/locality account, in: *Folia Linguistica* 29: 223-264.

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Appendix

Here, I provide more corpus examples showing that ENQs introduced by *dlaczego* in Polish are not a peripheral matter of the Polish infinitival system. As it turns out, they are compatible with different class of clause-embedding predicates.

- (1) verbs of retaining knowledge (*wiedzieć* 'know'):

 Oni wiedzieli [ENQ dlaczego wiać]
 they know_{l-PTCP.VIR} why scram_{INF}
 'The knew why they should scram.'
- (2) inquisitive verbs (pytać 'ask'): **Pytasz** [ENO dlaczego odrzucać jedna nie druga] ask_{2SG} why reject_{INF} one and not other 'Are you asking (me) why we should reject the first (theory) and not the other one?'
- (3) cogitation verbs (rozumieć 'understand'):

 Nie rozumiem [ENQ dlaczego usuwać]

 NEG understand_{1SG} why delete_{INF}

 'I don't understand why I should delete (it).'