Metacommunicative-*why* fragments as probes into the grammar of the speech act layer

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Abstract

The English lexical item *why* can be used metacommunicatively in response to a previous question act. In these cases, its meaning is similar to "Why are you (the original questioner) asking me (the original addressee) that question?" This is also true of *why*'s counterparts in a range of other languages. We demonstrate how metacommunicative, or meta, *why*'s use and meaning is similar to and different from the paraphrase above, proposing a modal-driven ontology for *why*, and explore how different constructions involving meta-*why* are derived. We argue that meta-*why* is derived by eliding a question act, a syntactic object larger than a proposition, and provide support for theoretical frameworks in which discourse management and interlocutor commitment acts are encoded in syntax.

1 Introduction

The syntax-discourse interface is a vital and vibrant focal point for linguistic study in terms of theory, acquisition, cognition and typology. Understanding interfaces, however, requires an understanding of the reach and extent of the two modules that are interacting. The speech act[1] syntax enterprise of the 21st century (inspired by Ross's 1970 work) has advanced the claim that there are syntactic projections concerned with the expression of information about interlocutors and discourse structure (Speas & Tenny 2003; Hill 2007a; b; 2013; Krifka 2014; 2021; Wiltschko & Heim 2016; Woods 2016; 2021 *inter alia*) rather than leaving these types of information to fall solely within the purview of pragmatics or sociolinguistics. This article will support the speech act syntax enterprise and the postulation of speech act-specific syntactic projections by using the following data point[2] as a springboard:

(1) A. Is Sally here?
     B. Why? [≃ why are you asking me that?]

This data point was previously addressed by Ginzburg (2012) using Type Theory with Records (Cooper 2005; 2011) and treated as a fragmentary utterance. We will adopt Ginzburg's terms in referring to *why*s like those in (1) *metacommunicative* uses of *why* (henceforth meta-*why*). Meta-*why* contrasts with non-metacommunicative fragmentary uses of *why* like those in (2):

(2) A. Sally built a wall.
     B. Why? [= for what reason did she build a wall?]
     B′. Why? [= for what purpose did she build a wall?]

Where fragmentary *why* in (2) targets the reason for the overt proposition in the preceding utterance, meta-*why* appears to target the reason for making the preceding speech act, specifically a question, itself. Ginzburg (2012: 313) also claims that they differ intonationally, with a simple rise contour on meta-*why* and a rise-fall tune on on reason- and purpose-*why*.

Ginzburg (2012) also notes that the kinds of discourse contexts in which meta-*why* is used are many and varied. It may be used when the answer to the preceding question is complex and the addressee wants to diagnose which part is relevant to the speaker's conversational needs; when the addressee does not know the answer but with more information could direct the speaker to the answer; or when the addressee is suspicious of the speaker's motives. He analyses meta-*why* as a non-sentential utterance separate from other types of fragmentary *why* and claims that it encodes particular properties, leading to the above range of interpretations.

In this paper, we do not treat meta-*why* as a non-sentential utterance but rather claim that it is the result of ellipsis applied to a larger syntactic structure.[3] The basis for our argument is that meta-*why* is restricted by both semantic *and* syntactic properties of the utterance. Moreover, we provide novel data demonstrating that it can co-occur with overt material and demonstrate how this is evidence that even bare meta-*why* contains silent clausal structure. We also briefly consider languages in which their equivalent of meta-*why* takes a different lexical form and is not subject to the same syntactic restrictions, analysing these kinds of utterances as truly non-sentential.

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1   Although the examples featured in this paper are taken from spoken languages, the use of the terms 'speech' and 'speech act' should not be taken to imply that the claims made herein do not also apply to signed languages. We will use these terms, along with 'speaker', to reflect theoretical work in the past, but we recognise that not all language users are speakers and not all speech acts are spoken.

2   Although most of the data in this article are from English, the core datum also holds in (at least) Afrikaans, Auslan, British Sign Language, Cantonese, Catalan, Danish, Dutch, French, German, Greek, Hebrew, Hungarian, Mandarin Chinese, Norwegian, Pahari-Pothwari, Romanian (for some speakers), Spanish, Swedish (as spoken in Sweden), Tamil, and Turkish. Thanks to the attendees of CamCoS 5 (2016), Farah Nazir, Adam Schembri and others named individually below for sharing their intuitions. We expect that this is not the full extent of the phenomenon.

3   We will not critique Ginzburg's analysis in detail here as it is so fundamentally different, using a completely different framework, that there is simply not enough space in this article format to produce a coherent comparison. However, the strong evidence that we present for the sentential nature of meta-*why* itself suggests that Ginzburg's analysis cannot be wholly correct, as it cannot explain the data in Sections 3 and 5.2.

The paper is structured as follows. In Section 2, we describe the meaning and usage conditions of meta-*why* with respect to discourse and syntactic factors and flesh out the differences between meta-*why* and other instances of *why*, sketching a modal-driven ontology. In Section 3 we demonstrate that meta-*why*-fragments result from a process of ellipsis and that this process is very similar to *why*-stripping. In Section 4 we show that the antecedent for ellipsis is not a typical *why*-question akin to "Why are you asking me this?", and in Section 5 we adopt modern speech act theory to analyse meta-*why* utterances as the ellipsis of an illocutionary act phrase, a discourse-related projection that takes ForceP (the proposition) as its complement. Section 6 concludes.

2 Meaning and usage conditions
2.1 Usage restrictions: clause types and force

Meta-*why*-fragments may only appear after interrogatively-typed information-seeking questions. Accordingly, meta-*why* is infelicitous if it follows questions that are neither interrogatively-typed nor information-seeking.

(3)   **Echo questions**
      A: He said WHAT?
      B: #Why? [intended ≃ why are you asking that?]

(4)   **Declarative questions** (cf. Gunlogson 2001)
      A: Sally is here?
      B: #Why? [intended ≃ why are you asking that?]

(5)   **Rhetorical questions**[4]
      Mother (to naughty son): Will you ever behave properly?
      Son: Why? [≠ why are you asking that?]
                [≃ why should I behave properly?]

(6)   **Rhetorical questions: Greek**[5]
      Mother: tha   ghinis   pote anthropos esi?
              will become.2SG ever human   you
              "Will you ever behave properly?"
      Son: Giati?
           why
           "Why?" [≠ why are you asking that]
                  [≃ why should I behave properly?]

(7)   **Interrogative-typed exclamatives** (cf. Taniguchi 2017)
      A: Isn't HE a charmer?!
      B: #Why? [intended ≃ why are you saying that?][6]

It is also excluded from the turn following a declarative:[7]

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4   Some informants indicate that they can get a metacommunicative reading for *why* following an example like (5). For example, an anonymous reviewer suggests that it would be acceptable if the child has been behaving well lately, but the mother has fallen into the habit of uttering such a question. We must assume that a rhetorical question is only interpreted as such if the speaker expects that both speaker and addressee share the same conversational background for the question. If for some reason the intentions of the speaker and the interpretation of the addressee do not align—as in the reviewer's context above—then a metacommunicative effect may obtain, but only because the question is now not interpreted as rhetorical by the addressee. For more on the importance of shared conversational backgrounds and the importance of all interlocutors recognising whether the question is open or not, see Sections 2.2.2 and 5.3.

5   Thanks to Maria-Margarita Makri for the Greek data.

6   In fact, a fragment *why* question seems to be excluded as a response to any form of exclamative. Thanks to William van der Wurff for drawing this point out, which we leave for future research.

7   We do not deal with imperatives here as the data is a little trickier and we do not have the space to do it justice. Suffice it to say that we think that *why*-fragments following imperatives do not target the making of the speech act, but rather why the addressee *should* cause the content of the imperative to be the case. Thanks to Hazel Pearson for giving us food for thought here.

(8)   **Declaratives**[8]
        A: Sally is here.
        B: #Why? [intended ≏ why are you telling me that?]

Meta-*why*-fragments cannot be licensed by pragmatic meaning alone; for example, they are not licit in response to indirect questions.

(9)   A: She wonders whether Sam is coming to the party tonight.
        B: Why? [≏ Why is she wondering about that question?]
                   [≠ Why are you asking me that?]

Our first core observation is therefore as follows: neither clause-type alone nor perlocutionary force in the sense of Austin (1962) are useful indicators of the distribution of meta-*why*, as both overgenerate.

A second observation, already illustrated in (9), is that meta-*why* can only target matrix questions. In the event that the only question in the preceding utterance is embedded, a fragment-*why* question is interpreted as a reason- or purpose-*why* over the matrix predicate. The *why*-fragment in (10) asks for a reason for the matrix proposition, in (11) it asks for the reason or purpose behind the request to bring a tennis racket to a party, and in (12) it asks for a reason why the addressee should do as the speaker (indirectly) requests (see Section 2.2.2 for more on the interaction between modals and *why*):

(10)   A: I wonder if Sam is coming to the party tonight.
        B: Why? [≠ Why are you asking me that?]
                   [≏ Why are you thinking about that?]

(11)   A: I asked if Sam would bring his tennis racket to the party tonight.
        B: Why? [≠ Why are you asking me that?]
                   [≏ For what reason did you ask that?]
                   [≏ For what purpose did you ask S. to bring a racket?]

(12)   A: Will you just ask if I'll help you already?!
        B: Why? [≠ Why are you asking me that?]
                   [≏ Why would/should I ask…?]

Having argued that meta-*why* only targets root information-seeking questions, the next section investigates in more detail the usage properties of meta-*why*. It also seeks to distinguish it from reason-/purpose-*why* with reference to the factors that determine what constitutes an appropriate answer to each type of *why*.

2.2 The meaning of metacommunicative-why
2.2.1 Speakers and addressees

Meta-*why*'s distribution in discourse is restricted in terms of the content it can access and the interlocutors who may deploy it. As noted by Ginzburg (2012: 313), only the addressee of the relevant question can use meta-*why*:

(13)   *Context: A courtroom.*
        Lawyer, to defendant: Were you wearing blue on the night of 13th April?
        Judge, to lawyer: #Why? [intended ≏ why are you asking him that?]

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8   A fragment *why* with a similar effect to meta-*why* can occur after declaratives:

(i)   *Context: a dinner party. After eating, your notoriously embarrassing dad announces:*
        Dad: Right, I'm off to the toilet now.
        You: Whyyy?

We argue that this is a different case of fragment *why* as it requires a shared cultural norm to be subverted, an exaggerated rising intonation contour, and may be used by a third-party to the conversation, which is not the case with meta-*why*. Moreover, it seems to quantify over the affect of the addressee towards the speaker rather than the speaker's original speech act; its interpretation is something like "Why are you so embarrassing?" rather than straightforwardly "Why are you telling me/us this?". We won't go into further details as to this use of meta-*why* here, but thank James Griffiths (p.c.) for the example.

However, we argue that the addressee of the original question may be understood as slightly broader than the single person to whom the question is addressed. George Tsoulas (p.c.) suggests that the following scenario, minimally different from (13), is in fact felicitous:

(14)   Prosecution lawyer, to defendant: Were you wearing blue on the night of 13th April?
          Defence lawyer: Why?

As the defence lawyer has the right to speak on behalf of the defendant, she is effectively the addressee of the prosecution lawyer's question too.

We further observe that the addressee of the original question need not be one unique individual, as meta-*why* is fine in contexts where the original question is addressed to a group, as long as the utterer of meta-*why* can plausibly be understood to be an addressee of the original question.

(15)   Cookery teacher: How many eggs should I add to the cake?
          Class member: Why? [≃ why are you asking us that?]

Further to this, meta-*why* also cannot be used by the original questioner to induce the addressee to make explicit the questioner's own motivations (see also Ginzburg 2012: 314):

(16)   Where is Sally? #Why? [intended ≃ why am I asking you this?]

(17)   *Context: Cookery teacher, to class:*
          How many eggs should I add to the cake? Why?   [≠ why am I asking this?]

Compare (17) with the legitimate (18).

(18)   *Context: Cookery teacher, to class:*
          How many eggs should I add to the cake? Why am I asking you this?

In (18), *why* appears to be requesting a reason for the teacher's question. Though this seems to be precisely the meaning of meta-*why*, we have already seen that meta-*why* differs from reason- and purpose-*why*. We resketch the differences between reason- and purpose-*why* in (19) below:

(19)   A: Why did you build a wall?
          B: To block my garden from my neighbours' view.   PURPOSE
          B′:   Because my neighbours keep looking into my garden.   REASON

While *why* in (19) can be replaced by *For what purpose?* to elicit response B or *For what reason?* to elicit response B′, meta-*why* cannot be replaced by either of these fragmentary paraphrases:

(20)   A: Is Sally here?
          B′:   #For what reason?
          B″:   #For what purpose?

To understand why this is, we will now investigate how different types of *why* differ based on the information that informs their possible answers, ultimately drawing an analogy between different types of *why* and different modal flavours.

2.2.2 A brief ontology of *why*

Koura (1988) distinguishes between a *why* whose answer pertains to the achievement of an endpoint (purpose-*why*) and a *why* whose answer depends on natural laws and how they determine causal relationships to explain a connection between the explanandum and the explanation (reason-*why*). Bromberger (1992) also invokes natural law as a condition that defines possible answers to reason-*why* questions. This characterisation of different types of *why* recalls a Kratzerian approach to modality (Kratzer 1981; 1991; 2012), wherein modals are distinguished by two contextual factors. This is summarised by Katz et al. (2012: 489) as follows:

> […] the *modal base*, which determines the possibilities that are relevant in the current context, and the *ordering source*, which provides a set of propositions encoding the priorities among these possibilities. The ordering source induces a "goodness" ordering on worlds, and this ordering serves as the basis for interpreting [modal] sentences.

To flesh out the analogy: just as teleological modals and deontic modals are distinguished by their ordering sources (the performance of actions favourable to some outcome versus adherence to some set of laws), so answers to purpose- and reason-*why* are distinguished by similar sets of determining factors—the actions that are favourable to reaching a given outcome versus the laws that dictate whether an event or state will obtain in some context.

Interestingly, when these types of *why* query propositions that contain modals, the explanandum— that which requires explanation—shifts from the outcome/event/state to target the modal's ordering source. This is illustrated in the reason-*why*[9] examples in (21)–(22). Moreover, when the premises that underpin the modal ordering source are overt, as in (23), the explanandum shifts again to the legitimacy of the ordering source:

(21) A: Emma eats her vegetables.
      B: Why? [≑ On what basis does she choose to eat vegetables?]

(22) A: Emma must eat her vegetables.
      B: Why? [≑ On what basis is she obliged to eat them?]

(23) A: Given the doctor's orders, Emma must eat her vegetables.
      B: Why? [≑ On what basis does the doctor make that order?]

The behaviour of meta-*why*-fragments differs, however. Even if premises for the original question are provided, the interpretation of meta-*why* remains the same:

(24) A: Has Emma eaten her vegetables?
      B: Why? [≑ why are you asking me that question in this context?]

(25) A: Must Emma eat her vegetables?
      B: Why? [≑ why are you asking me that question in this context?]

(26) A: Given the doctor's orders, must Emma eat her vegetables?
      B: Why? [≑ why are you asking me that question, and in the context of the doctor's orders?]

We can therefore observe that the explanandum of a meta-*why* question is always the premise(s) that motivate the previous speaker's question, which implies that no matter how much context the previous speaker has given for their question, the utterer of meta-*why* believes that there is some information that still has not been shared with them. It also suggests that meta-*why* outscopes modality, unlike reason- and purpose-*why*s.

Moreover, answers to meta-*why* questions are not defined by epistemic factors in general, such as stereotypical expectations as to why any speaker would ask some given question, but they specifically target information that only that original questioner could possibly provide, as it pertains to their motivations and intentions within the discourse—information that Ginzburg (2012: 300–301) refers to as genre recognition. In other words, the ordering of answers to meta-*why* questions can *only* be determined by the speaker's intentions, and never by circumstantial or stereotypical factors. Let us briefly investigate this using two apparent (constructed) counterexamples where a third person responds to the meta-*why*-fragment.

(27) *Context: a courtroom. It has already been established that the perpetrator of a theft was wearing blue during the act.*
      Prosecution lawyer, to defendant: Were you wearing blue on the night of 13th April?
      Defence lawyer, to judge: Why?
      Judge, to defence lawyer: You know perfectly well why,[10] counsel—let's not waste time.

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9   For space we only give reason-*why* examples here, as it is most important to tease meta-*why* apart from reason-*why* as in "For what reason are you asking me…". The observations illustrated by (21)–(23) also hold for purpose-*why*.

10   An anonymous reviewer points out that this looks like a case of embedded meta-*why*, as it seems to be interpreted as "You know why she's asking that." Our intuition is that this is a case of quotation of meta-*why* itself, as sincere uses of meta-*why* are not embeddable:

   A: Is Sally here?
   B: I just wonder why *(you're asking me that).

In this case, the defence lawyer's meta-*why* is considered insincere as the prosecution lawyer's reasons for asking the question have already been established and accepted by all interlocutors (namely relationship of the shirt colour to the case and the role of the prosecution lawyer in the context), so the meta-*why* question itself is rejected rather than answered.

(28)   *Context: parents talking to their truculent child.*
         Parent 1: Did you go out with Jay last night?
         Child: Why?
         Parent 2: Because we're just concerned for your wellbeing.

In this case, the parents are effectively acting as one speaker as they share the exact same intentions with respect to the question at issue.

We therefore conclude that meta-*why* targets the private knowledge and intentions of the original speaker and that that knowledge must not be already shared between the speaker and the addressee. As an extension of that, answers to meta-*why* cannot be solely defined by any other set of factors, such as circumstance, natural law or stereotypical expectation.

2.2.3 Lexical realisations of different *whys*

We also find empirical motivation for a distinction between reason- and purpose-*why* on the one hand, and meta-*why* on the other, in languages that have different lexical items for reason- and purpose-*why*. That said, we see some ways in which meta- and reason-*why* are similar and distinguished from purpose-*why*.

Take Russian as an example. Reason- and purpose-*why* are expressed by two different lexemes, *počemu* and *začem* respectively, which Stepanov & Tsai (2008) argue to be merged at different positions in syntactic structure.

(29)   *Purpose-why* (Stepanov & Tsai 2008: 609–610)
         a.   Začem   Ivan sjuda prišel?
              why$_{PURPOSE}$ Ivan here   come
              "For what purpose did Ivan come here?"

         b.   *Začem   vy ne skazali mne   ob   etom?
              why$_{PURPOSE}$ you not said   me-DAT about this
              Intended: "Why didn't you tell me about this?"

(30)   *Reason-why* (Stepanov & Tsai 2008: 610)
         a.   Počemu   Ivan sjuda prišel?
              why$_{REASON}$ Ivan here   come
              "Why did Ivan come here?"

         b.   Počemu   vy ne skazali mne   ob   etom?
              why$_{REASON}$ you not said   me-DAT about this
              "Why didn't you tell me about this?"

However, neither can be used metacommunicatively:[11]

(31)   A: Sally zdes?
              Sally here
              "Is Sally here?"
         B: *Začem?
              why$_{PURPOSE}$
              Intended: "Why [are you asking me]?"
         B': *Počemu?
              why$_{REASON}$
              Intended: "Why [are you asking me]?"
         B'': A   chto?
              PRT   what
              "Why?" [≃ why are you asking me?]

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11   This observation is due to Jeremy Hartman (p.c.); the licit response datum in B″ is due to Lena Karvovskaya (p.c.).

Russian *a chto* is not the same type of element as meta-*why* as it can be used metacommunicatively in response to declaratives (just like English *And (what)?/So (what)?*) and does not appear to be sentential, as we will show in Section 5.2. We will otherwise leave elements like *a chto* for future work.

Ginzburg (2012: 313) also notes that in Hebrew and German, languages with multiple lexemes glossed as *why* in English, only one may be used metacommunicatively. In these cases, the lexeme used for meta-*why* must also be compatible with a reason-*why* reading:

(32)   A: ha'im   bar tavo   maxar
            Is-it-the-case Bar come-FUT-3RD-SG tomorrow?
            "Will Bar be coming tomorrow?"
        B: lama? / madua?
            why   / why$_{\text{NON-META}}$
            "Why (do you ask)?"/"Why (would she come)?"

Hebrew (Ginzburg 2012: 313)

(33)   A: Kommt   Bar morgen?
            come-PRES.3SG Bar tomorrow
            "Is Bar coming tomorrow?"
        B: Warum? / Weshalb? / Wozu?
            why   / why$_{\text{REASON}}$ / why$_{\text{PURPOSE}}$
            "Why (do you ask)?"/"For what reason would she come?"/"What purpose
            would her coming serve?"   *German*, following (32)

This is intuitively unsurprising and is reflected in our working paraphrase for meta-*why* as asking for a reason for making a question speech act. However, we have already seen in Section 2.2.2, and will further see in the sections to follow, that meta-*why* should still be treated as a different lexical item from reason-*why*, irrespective of homophony.

In the rest of the article, starting with Section 3, we will provide evidence for our principal novel theoretical claim with respect to meta-*why*: that ellipsis is involved in meta-*why*-fragments.[12]

3 Evidence for ellipsis

In this section we deal with a type of data that Ginzburg (2012) does not discuss in relation to meta-*why*, namely data like (34):

(34)   A: Is Sally here?
        B: Why Sally?   [≃ why are you asking me this about Sally specifically?]

(34) looks very similar to the phenomenon of *why*-stripping, shown in (35):

(35)   A: Sally is here.
        B: Why Sally? [= why is Sally, specifically, here (as opposed to some other
            person)?]

Following Yoshida et al.'s (2015) generativist account of *why*-stripping, we will investigate meta-*why*-fragments that co-occur with a second, non-wh item, like (34), and propose that these data provide evidence for silent syntactic structure in meta-*why*-fragments. In line with Yoshida et al. (2015), we refer henceforth to the *why* in *why*-stripping as a *why*-remnant, and the non-wh material in examples like (34)–(35) as the non-wh-remnant.

Yoshida et al. (2015) demonstrate that *why*-stripping as in (35) corresponds to a full interrogative sentence to which clausal ellipsis has applied. They do this by appealing to evidence from case connectivity in languages like German (36), binding connectivity (38) and preposition

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12   I am indebted to Lisa Cheng and Anikó Lipták for their wonderfully generous help with the material to follow on ellipsis, in particular Section 3 [RW].

stranding ((40)–(41)), all typical diagnostics for silent syntactic material as they are contingent on the presence of case assigners, binders and A′-movement. Meta-*why*-fragments pass all of these diagnostic tests too (see (37), (39) and (42)–(43)):[13]

(36)　　**Case connectivity in German: *why*-stripping**
　　　　A:　Er hat der　　Kanzlerin　　　gefallen.
　　　　　　he has the.DAT chancellor-FEM pleased
　　　　　　"He has pleased the chancellor."
　　　　B:　Warum der/#die　　　　Kanzlerin?
　　　　　　why　　the.DAT/the.ACC chancellor-FEM
　　　　　　Why the chancellor?
　　　　　　　　　　　　　　　　　　　　Adapted from Yoshida et al. 2015: 331

(37)　　**Case connectivity in German: meta-*why*-fragments**
　　　　A:　Hat er der　　Kanzlerin　　　gefallen?
　　　　　　has he the.DAT chancellor-FEM pleased
　　　　　　"Did he please the chancellor?"
　　　　B:　Warum der/#die　　　　Kanzlerin?
　　　　　　why　　the.DAT/the.ACC chancellor-FEM
　　　　　　Why the chancellor? [≃ why are you asking about the chancellor specifically?]

(38)　　**Variable binding effects: *why*-stripping**
　　　　A:　No linguist$_1$ here recommended her$_1$ own book.
　　　　B:　Why her$_1$ own book?
　　　　　　　　　　　　　　　　　　　　Adapted from Yoshida et al. 2015: 332

(39)　　**Variable binding effects: meta-*why*-fragments**
　　　　A:　Did any linguist$_1$ here recommend her$_1$ own book?
　　　　B:　Why her$_1$ own book? [≃ why are you asking me about [each of those
　　　　　　linguists]'$_1$ own book specifically?]

(40)　　**Preposition-stranding in English: *why*-stripping**
　　　　A:　Ashley talked to Jamie.
　　　　B:　Why (to) Jamie?
　　　　　　　　　　　　　　　　　　　　Adapted from Yoshida et al. 2015: 334

(41)　　**Preposition-stranding in German: *why*-stripping**
　　　　A:　Ashley hat mit Jamie gesprochen.
　　　　　　Ashley has with Jamie spoken
　　　　B:　Warum *(mit) Jamie?
　　　　　　　　　　　　　　　　　　　　Adapted from Yoshida et al. 2015: 334

(42)　　**Preposition-stranding in English: meta-*why*-fragments**
　　　　A:　Did Ashley talk to Jamie yet?
　　　　B:　Why (to) Jamie? [≃ why are you asking about Jamie specifically?]

(43)　　**Preposition-stranding in German: meta-*why*-fragments**
　　　　A:　Hat Ashley mit Jamie gesprochen?
　　　　　　has Ashley with Jamie spoken
　　　　B:　Warum *(mit) Jamie? [≃ cf. (42)]

Note, as do Yoshida et al. (2015), that all of these diagnostics also hold in cases of sluicing, as illustrated in (44)–(46):

13　Thanks to Moritz Hellwig for the German meta-*why*-stripping judgements.

(44)   *German*

Er will   jemandem   schmeicheln, aber Sie   wissen nicht wem/   *wen.

he wants someone.DAT flatter.INF   but they know   not   who.DAT/ who.ACC

He wants to flatter someone but they don't know who.

Yoshida et al. 2015: 331

(45)   *English*

Each linguist₁ here recommended some of her₁ own books, but I don't know which of her₁ own books.

(46)   *German*

Ashley hat mit   jemandem   gesprochen, aber ich weiss nicht *(mit) wem.

Ashley has with someone.DAT spoken   but I   know not   with   who.DAT

"Ashley has spoken with someone, but I don't know who (with)."

Why-stripping, meta-*why*-fragments and sluicing are also all island insensitive, in that the moved non-wh-remnant (bolded in the examples below) can be extracted from an island in the elided material:

(47)   **Island insensitivity: *why*-stripping**

A: Katie loves girls who learn **Italian**.

B: Why Italian?

(48)   **Island insensitivity: sluicing**

Katie loves a girl who is learning **some language**, but I don't know which language.

(49)   **Island insensitivity: meta-*why*-stripping**

A: Who loves the girl who is learning **Italian**?

B: Why Italian? [≈ Why are you asking me about Italian specifically?]

However, a sub-type of sluicing, *why*-sluicing, differs from (47)–(49) in that it is subject to far stricter locality restrictions:

(50)   **Island sensitivity: *why*-sluicing**

Katie loves a girl who is learning Italian, but I don't know why.

[= why Katie loves a girl who is learning Italian]

[≠ why that girl is learning Italian]

The unavailability of that second reading of (50) suggests that the ellipsis involved in meta-*why*-fragments with non-wh-remnants is not sluicing. Moreover, other differences exist between *why*-stripping and meta-*why*-fragments on the one hand and sluicing on the other.

In the case of sluicing, only wh-constituents may form the remnant, though they may be any type of wh-constituent. In both *why*-stripping and meta-*why*-fragments of the type in (34), only a *why* remnant plus a non-wh-remnant can form the overall remnant. This may be smaller than a phrase and receives a focused interpretation. Note that in typical *why*-stripping, *how come* may, for some speakers, take the place of *why*, but never in meta-*why*-fragments.

(51)   **Remnants: sluicing**

a.   Katie did something at some time in some place with some person, but I don't know what/who/when/where/why/how/which thing…

b.   Katie met a girl in the park but I don't know who *girl.

(52)   **Remnants: *why*-stripping**

A: Katie decided to make natto with Yasmeen in Huddersfield after the party.

B: Why natto/Yasmeen/in Huddersfield/after the party?

B′:   %How come natto/Yasmeen/in Huddersfield/after the party?

B″:   Why after/make?

(53)   **Remnants: meta-*why*-fragments**
         A: Did Katie decide to make natto with Yasmeen in Huddersfield after the party?
         B: Why natto/Yasmeen/in Huddersfield/after the party?
         B′:   *How come natto/Yasmeen/in Huddersfield/after the party?
         B″:   Why after/make?

Finally, sluicing shows scope ambiguity in the clause to which ellipsis has applied, where *why*-stripping does not (cf. Yoshida et al. 2015: 353–354). Meta-*why*-fragments are a case apart again, as *why* does not interact with the quantifier at all, given that it scopes over reasons for the speech act rather than the proposition(s) at issue. As a result, sluicing allows pair-list readings, which *why*-stripping and meta-*why*-fragments lack, but for different reasons.

(54)   **Scope ambiguity: *why*-sluicing**
         Everybody hates John, but I don't know why.   (why > every, every > why)

(55)   **Lack of scope ambiguity: *why*-stripping**
         A: Everyone hates John.
         B: Why John?
         A: Because they say he's rude.   (why > every)
         A′:   #Tom said he's rude and Mary said he's mean and James said…

                                                                      (*every > why)

(56)   **Lack of scope ambiguity: meta-*why*-fragments**
         A: Does everyone hate John?
         B: Why John?   [≃ why are you asking me about John specifically?]
         A: Because you know him well and might be able to confirm what I'm hearing
                about him.
         A′:   #Because Tom said he's rude and Mary said he's mean and James said…

On the basis of the above evidence, we propose (a) that meta-*why*-fragments like with a non-wh-remnant contain silent syntactic structure and (b) that meta-*why*-fragments are not formed by sluicing.

Let us then outline Yoshida et al.'s (2015) proposal for *why*-stripping. First, they claim that the *why*-remnant in *why*-stripping does not move from an adjunct position in the clause, but is base-generated high in the clause in what they call an "upper CP layer" (Yoshida et al. 2015: 346), CP being the highest projection (or layer of projections) in the clause in Cartographic syntax (cf. Rizzi 1997; 2002 i.a.). This is motivated by the lack of scope ambiguity and the island insensitivity of *why*-stripping compared with *why*-sluicing, in which the *why*-remnant does appear to be extracted from an adjunct position. Second, they claim that the non-wh-remnant (e.g. *Sally* in (35)) is focus-moved to a position just below the position in which *why* is base-generated. The analysis of this movement as focus-movement is motivated by the contrastive interpretation of the non-wh-remnant, the potentially non-phrasal nature of this remnant, its lack of constituency with the *why*-remnant and the lack of scope ambiguity.[14] The structure of *why*-stripping is illustrated in (57):

(57)   [$_{CP1}$ Why [$_{C1}$] [$_{CP2}$ [$_{DP}$ Sally] [$_{C2}$] [~~$_{TP}$ t$_{DP}$ is here~~]]]
                                                      Adapted from Yoshida et al. 2015: 355

Finally, they claim that ellipsis in *why*-stripping is obligatory because the structure above *only* results due to ellipsis. As focus is usually marked by stress in situ in English, if the focused material is contained within the ellipsis site, the focus information will not be recoverable (cf. Pesetsky 1997) if movement of the focused material out of the ellipsis site does not apply.

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14   We have not described in detail how *why* and focus interact, but direct interested readers to Yoshida et al. 2015: Section 3.1.

In the rest of the article, we will adopt the spirit of Yoshida et al's proposal given the similarities between meta-*why*-fragments and *why*-stripping identified above. However, there are still some differences between the two constructions. A core difference is that while *why*-stripping occurs in response to a declarative, meta-*why*-fragments can only respond to an interrogatively-typed question. Moreover, *why*-stripping can respond to embedded clauses, can be used without a linguistic antecedent, and can be itself embedded. We have already seen that these first two facts do not hold for meta-*why*-fragments; (58) below shows that the last of these is also impossible.

(58)　　A:　　Is Sally here?
　　　　B:　　May I ask why *(you are asking me that)?

It is also the case that the *why*-remnant in English *why*-stripping can be interpreted as either purpose- or reason-, but not meta-, *why*:

(59)　　A:　　Sally built a wall.
　　　　B:　　Why a wall?
　　　　A:　　To completely block her garden from her neighbours' view.　　　Purpose
　　　　A′:　　Because her neighbours kept looking through the fence into her garden.　　Reason
　　　　A″:　　#Because I thought you might want to borrow the plans.　　　Meta

We take these differences between *why*-stripping and meta-*why*-fragments to motivate three differences between our account to follow for meta-*why* and that of Yoshida et al. (2015) for *why*-stripping: (1) the position of the base-generated meta-*why*,[15] (2) the position of the non-*why*-remnant and, relatedly, (3) that meta-*why*-stripping can occur without a non-*why*-remnant (i.e. in cases of bare meta-*why*). We will henceforth refer to examples like (34) as meta-*why*-stripping to distinguish them from typical *why*-stripping.[16]
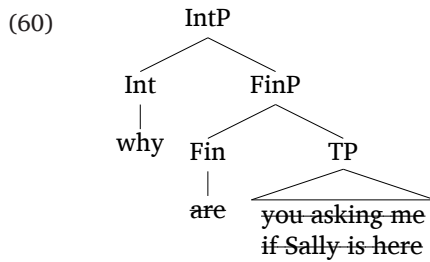
Having established a basis for an ellipsis account, we now turn to the identity of the elided structure. There are two approaches that we could take to an ellipsis-based analysis of meta-*why*. Under the first type of account, meta-*why* could be the result of the ellipsis of the rest of a typical reason-*why* question such as "Why [are you asking me if Sally is here]?". Under the second, meta-*why* could scope over an illocutionary act of questioning that is realised in syntax through dedicated illocutionary act projections (cf. Speas & Tenny 2003, Hill 2007a; b; 2013, Woods 2016; 2021), and the clause contained within the illocutionary act is elided. Section 4 will show that the first option is not tenable, whereas Section 5 shows that the second is promising in terms of capturing the meaning of and restrictions on meta-*why*. We will sketch the model of speech act syntax that we assume (Section 5.1) and the syntactic proposal we will pursue before providing additional justification for an ellipsis account (Section 5.2). We will then provide a description of the semantics of meta-*why* and indicate directions for formalising this, as well as modelling its role in discourse, to further motivate our account of its position in the speech act structure (Section 5.3).

4 What meta-*why*-fragments are not: Ellipsis of the rest of a typical 'why' question

Though we have already shown that meta-*why* is interpreted and distributes differently from a fragmentary reason-*why*, let us show definitively that an approach as illustrated in (60) is not tenable for meta-*why*-fragments.

15　Yoshida et al. (2015) claim that *why* is likely generated in IntP or ForceP, which is why *why*-strips are interpreted as questions. However, recall that the distribution of meta-*why*-fragments is different from *why*-interrogatives. We therefore also derive the apparent interrogativity of meta-*why*-fragments differently, as shown in Section 5.3.

16　Note that we will not deal with the intonation of meta-*why*-stripping, nor whether it differs from bare meta-*why* in this article as we do not have the necessary prosodic expertise. However we think that it is a valid and important next step for understanding elements like meta-*why* and for refining the speech act syntax enterprise.

(60)

```
          IntP
         /    \
       Int    FinP
        |     /    \
       why  Fin    TP
             |    /    \
            a̶r̶e̶  y̶o̶u̶ ̶a̶s̶k̶i̶n̶g̶ ̶m̶e̶
                 i̶f̶ ̶S̶a̶l̶l̶y̶ ̶i̶s̶ ̶h̶e̶r̶e̶
```

cf. Stepanov & Tsai 2008; Yoshida et al. 2015

This analysis, with *why* in a position below ForceP in the extended CP (cf. Rizzi 2002), would collapse meta-*why* and reason-*why* readings, which is problematic for the English, German and the Russian data so far. It does not predict the fact that meta-*why* may only target the specific questioner's conversational background and motivations and, as IntP is embeddable, it does not preclude meta-*why* from use in indirect questions or explain some of the differences between meta- and typical *why*-stripping.

This type of analysis harks back to Ross's (1970) covert performative approach to speech acts, according to which all speech acts were embedded under a covert performative predicate, along with pronouns co-indexed with the discourse participants. His precise implementation, involving the elision of a full matrix clause plus complementiser such as "I ask you whether…" is, for reasons shown in Section 2, not likely to be correct for meta-*why*-fragments. Moreover, there are many possible predicates that could be elided, and no real way to tell which one has been:

(61) a. "Why are you asking…?"
      b. "Why should I answer…?"
      c. "Why do you want to know…?"

Note that the answers to the different locutions in (61) might not all be compatible with each other in a discourse; one's reason for asking does not necessarily constitute a reason why an addressee should answer, for example:

(62) *A is a member of the cooking class. B is the teacher.*
      A1: Why are you asking me how many eggs?
      B1: To check your learning/To engage the class/Because it's a typical teacher technique to avoid monologuing.
      A2: Why should I answer your question about how many eggs?
      B2: To check your learning/#To engage the class/#?Because I'm trying to avoid monologuing.

Note also that this approach would violate the No New Words condition (Chung 2006) on ellipsis[17] (see also Chung 2013 and Merchant 2013 on syntactic identity conditions for ellipsis), as this approach would be predicated on the idea that the silent predicates in (61) would have the potential to be pronounced.

Moreover, note that the interpretation of *why*-strips in contexts that only allow "why are you asking me…"-type locutions is interpreted as targeting a reason for the 'embedded' proposition, not the asking proposition:

(63) *Context: a cookery teacher to the class.*
      How many eggs do you add, and why eggs?
              [= why should you add eggs at this point in the process?]
              [≠ why am I asking you about eggs right now?]

The absence of the reading "Why am I asking you about eggs right now?" in (63) suggests that the metacommunicative reading obtaining in meta-*why*-strips is due to a specific meta-*why*-stripping mechanism and not to a typical *why*-strip over a silent or implied locution of the "Why are you asking me…"-type. The data in this paper so far does, however, indicate that the

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17   Thanks to Anikó Lipták for this observation.

linguistic antecedent for meta-*why*-strips includes syntactically-realised information about the illocutionary force and discourse participants.

In our proposal, we adopt a modern version of speech act syntax that does not encode a full embedding clause and we provide evidence for a very high base position for meta-*why*.

5 What we think they are: Ellipsis of a ForceP contained within an illocutionary act

The tree in (64) illustrates the core of our proposal, in which SAP stands for Speech Act Phrase and IAP stands for Illocutionary Act Phrase:

(64)

SAP
├─ Why
└─ ┌── SA
   └── IAP
       ├── IA
       │   └── QUESTION
       └── ForceP
           └── is Sally here
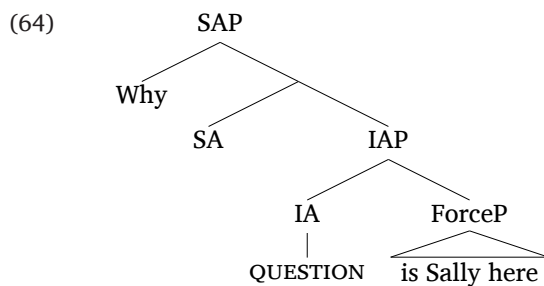
In this proposal, ForceP—the propositional domain—is deleted in meta-*why*-fragments. What remains is the speech act domain where syntax interfaces with discourse, following our claims that meta-*why* is a discourse-level modifier rather than forming part of the propositional content of the utterance. The IA head QUESTION is an operator that we claim is present in all question utterances, though it is typically silent in English. This proposal is contingent on a particular instantiation of speech act syntax, which we will outline before justifying its use in this context. We will not justify the speech act syntax enterprise itself here, and instead direct readers to the works cited in the rest of the paper.

5.1 Our speech act syntax framework

We adopt here Woods's (2016; 2021) approach to speech act syntax, which combines many of the principles of Hill (2007a) et seq. with details and terminology from Krifka (2014). In this approach, there are two discourse-related projections available in all root clauses above the clause typing head (here Force), teasing apart different projections for clause type (ForceP), illocutionary force (the Illocutionary Act Phrase, or IAP) and speech act-related syntactic items (the Speech Act Phrase, or SAP).

The differences between the IAP and the SAP are as follows. The IAP hosts syntactic items, both overt and covert, that encode information about the intended interpretation of the typed clause from the point of view of the speaker (cf. Woods 2016; 2021, also Coniglio & Zegrean 2012 for an earlier incarnation of this idea). Items in the IAP include discourse particles (Hill 2007a; Coniglio & Zegrean 2012; Haegeman & Hill 2013), which are known to cross-cut clause type but correlate with illocutionary meanings (i.e. what the speaker is committing to in terms of their knowledge and desires for the conversation), and overt markers of illocutionary force, e.g. request markers (Woods 2021).[18] We assume, like Coniglio & Zegrean (2012), a featural approach to clause typing, so the IAP selects for the relevant type of ForceP that can check its clause type features.

The SAP, in contrast, hosts syntactic items that quantify over that utterance (that is, the propositional content and its force), for example speech act adverbs, and elements that restrict or otherwise alter the ways in which the addressee may felicitously respond to the illocutionary act, such as the outmost particles in sentence final particle strings in Cantonese (Lam 2014; see also Wiltschko & Heim 2016).

Consequently, the IAP is inward-looking in the sense that it relates the propositional content to a specific discourse context, in particular to a specific speaker's intentions for that propositional

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18 Woods (2021) also provides a direct comparison of Cartographic (Cinque 1999) and speech act syntax accounts including Hill (2007) et seq., Wiltschko & Heim (2016) and Krifka (2021), as well as a tentative proposal that Cinque's (1999) EvidentialP may be equivalent to IAP.

content. Insodoing, the IAP is interpreted as an utterance entity.[19] The SAP is outward-looking and situates the utterance within that wider discourse, that is, as a move made and committed to by the speaker relative to prior discourse moves and future anticipated discourse moves. The IAP is embeddable in certain constructions often referred to embedded root clauses (cf. Hooper & Thompson 1973; Heycock 2006; Djärv 2019), such as Germanic embedded verb second (Krifka 2014), embedded inverted questions in English (Woods 2016) and embedded root-like constructions in Spanish, Catalan and Portuguese (Suñer 1993; Lahiri 2002; Mascarenhas 2009; González i Planas 2014; Villa-García 2015). The SAP is exclusively a root phenomenon (Ceong 2019).

Central to the analysis here is the claim that information-seeking questions have a specific IA head—QUESTION—which indicates explicitly that the ForceP it embeds is to be interpreted as an open information-seeking question and not as some other kind of 'directive' (in Searle's 1976 sense) such as a request or a command, even if the form of that propositional content is also typical of a request or command. The QUESTION head lifts the interrogative clause, a syntactic object, to the type of an utterance, e, which is interpreted as an information-seeking question act. To distinguish between this type of discourse entity and other entities, we might call the type of an utterance e^u, where u indicates 'utterance'. Adopting Lahiri's (2002) approach to coercion of propositions to an utterance entity, the following rule applies in the illocutionary act phrase. In this rule we assume a set Q of propositions expressed by ForceP of the type $\langle st,t \rangle$, a context c and an individual u that is an utterance entity:

(65) $Q \rightarrow \iota u \; [\text{UTT}(u, Q) \; \& \; c(u)]$
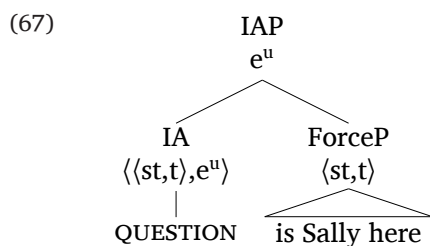
As such, the semantics of QUESTION are as follows:

(66) $\llbracket \text{QUESTION} \rrbracket = \lambda Q \iota u \; [\text{UTT}(u, Q) \; \& \; c(u)]$
        Defined if the epistemic state of the utterer of u in c is not a subset of the answers to Q and if the answer to Q is not a member of the shared discourse information (common ground).

To paraphrase and adapt Lahiri (2002: 281), UTT in (65)–(66) is defined as a two-place predicate with the meaning that u is an utterance of the precise expression Q of the semantic type of a set of propositions. Moreover, the utterance u is taken from (was made in) the context c.

This operator composes with the ForceP as follows:

(67)

```
                    IAP
                    eᵘ
                   /    \
               IA          ForceP
        ⟨⟨st,t⟩,eᵘ⟩        ⟨st,t⟩
               |           /    \
           QUESTION    is Sally here
```

QUESTION is therefore a function from a set of propositions, expressed as Q, to an utterance (discourse entity) made by the speaker with the content and form. A terminological note: Krifka (2014) refers to illocutionary acts not as utterance entities but as context change potentials. We believe that the potential to move the conversation forward comes at the next syntactic level, SAP, as in root clauses, the IAP is then taken as the complement of the SA head, which is concerned with response patterns to the utterance act (i.e. the potential to change the discourse context). Where, then, does meta-*why* fit in? We will argue that meta-*why* modifies not the utterance act by the original speaker, but how it is to impact on the discourse structure; therefore, meta-*why* modifies the SAP. We will justify this more fully in Section 5.3.

We can now make a proposal about the nature of the ellipsis site under meta-*why*. We claim that to achieve bare meta-*why*-fragments, ellipsis applies to the complement of the IA head:

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19   See (Merchant 2010) on using the assignment function to understand clausal anaphora and (Woods 2016) for more detail specific to speech act syntax.

(68)   [$_{SAP}$ Why [$_{IAP}$ QUESTION [$_{\overline{ForceP}}$ ~~is Sally here~~]]]?

In the case of non-bare meta-*why* (i.e. meta-*why*-strips), the proposal in (68) necessitates that the non-wh-remnant must move into a position above the IA head but below *why*. We assume here that the remnant adjoins to IAP and will pick up this point in Section 5.3.2.

The reason that ellipsis can apply is because the structure under meta-*why* is identical to its antecedent, namely the question that meta-*why* is responding to, and so can be elided on the basis of redundancy. However, this should also mean that ellipsis is not obligatory and indeed, we find cases of full overt questions under meta-*why*. We will now present such data to support our proposal that ForceP is the ellipsis site.

5.2 Evidence for ellipsis under a question-headed IAP

The following constructed examples in English (69), Spanish (70) and Turkish (71) demonstrate that ellipsis is not obligatory under meta-*why* as it can embed an overt question in full. They also demonstrate that meta-*why*-strips are possible in which the non-*why*-remnant is a wh-element from the embedded question.

(69)   *Context: an outraged parent [B] is telling a friend [A] about discovering an alcoholic
         beverage in their teenager's bedroom. A says:*
         English
         A: But who were they drinking it with?
         B: Why who?! You're missing the point![20]
         B′:   Why who were they drinking it with?! You're missing the point!

(70)   *Spanish*[21]
         A: Pero con quién   lo bebián?
               But   withwhom   it drink.IMPF
               "But who were they drinking it with?"
         B: Por qué   con quien?!
               Why   with whom
               "Why (are you asking) who with?! …"

(71)   *Turkish*[22]
         B: Neden kiminle   iciyolar?   Asil sorun ictikleri!
               why   with.who they.drink real issue that.they.drink
               "Why who are they drinking with?! The real issue is that they're drinking!"

         B′:   Nasil kiminle   iciyolar?   …
               how   with.who they.drink
               "Why who are they drinking with? …"

---

[20]   One non-linguist informant notes that *who* feels like a quotation in this utterance. We consider this intuition positive for our analysis because it indicates that the deleted material does pertain to the original speech act, and can be reproduced verbatim. Moreover, Andrew Weir (p.c) draws our attention to meta-*why*-strips like (i) below:

(i)   A: Do you fancy Mary?
       B: Why me?
       B′:   Why *you*?

Response B shows second-to-first pronoun shift, as expected under typical *why*-stripping. But response B′ also seems licit if 'you' is treated as a quotation, with quotation intonation. This suggests that there may be another way of deriving fragments under meta-*why* via an approach to quotation, though this cannot be the only route to deriving meta-*why*-fragments (see, for example, (72)–(73) below). Due to space restrictions we leave this for further work.

[21]   Thanks to an anonymous reviewer for an original example, adapted here.

[22]   All Turkish data is from Deniz Özyıldız, p.c., with thanks. Özyıldız notes that Turkish has two items that serve as meta-*why*: *neden* (lit. 'why') and *nasil* (lit. 'how'), both of which enter into meta-*why*-stripping. *Nasil* is apparently more natural in these constructions. Moreover, the examples with *nasil* have an falling tone that is not available with the *neden* examples, and the *nasil* examples cannot be expanded using an embedding verb where the *neden* examples can; compare (a) neden kiminle ictim (diye soruyorsun) ['Why (do you ask) who I drank with'] and (b) nasil kiminle ictim (*diye soruyorsun). We cannot do these Turkish data justice here but leave them for further research.

Note that in all the above cases, there is no intonational break between the *why* element and the embedded question and they all consist of one intonational contour.[23]

The data above support an ellipsis account of meta-*why*-fragments as they provide evidence for syntactic structure below meta-*why* and for the focus-movement aspect of our proposal. In (69)–(71), the *why*-strip by outraged parent B has two dimensions. While the *why*-strip can potentially be answered—why is A asking a "who" question specifically—an additional rhetorical effect of this construction, especially clear in the fully spelled out version in (69), is a rejection of A's question as orthogonal to the shocking (!) news at hand. We do not want to claim that rejection is integral to the meaning of meta-*why*, but it is plausibly the pragmatic result of focusing the entirety of A's question. We return briefly to this idea in Section 5.3.

These data also support an analysis in which meta-*why* is treated as different from reason-*why*. Multiple wh-fronting is ungrammatical in English and Spanish, and Turkish does not even have overt wh-fronting, yet the data above are licit.[24] Moreover, as we have already claimed, meta-*why* modifies the utterance in its discourse context rather than contributing to its truth-conditional content. This also accords well with the evidence that meta-*why*-fragments are crucially *not* identical in meaning to questions of the form "Why are you asking me that?"

A final note: the question that is elided under meta-*why* must be a QUESTION-headed IAP and not simply any IAP that embeds an interrogatively-typed ForceP. Recall that only interrogatively-typed information-seeking questions are available under meta-*why*; this holds in the case that the original question is fully spelled out too:

(72) a. *Why you were with who?   *Echo question*
      b. *Why you were with Sally?   *Rising declarative*
      c. *Why isn't HE a charmer!*[25]   *Negative exclamative*
      d. *Why will you just help me already!   *Rhetorical question*

Furthermore, assuming Woods's (2021) analysis of *please* as a REQUEST IA head, the following datum shows that REQUEST-headed IAPs cannot be overt under meta-*why*, whether or not the REQUEST marker is itself overt:

(73) *Context: A and B are siblings. B has a poor relationship with their mum and A is always
      trying to get them back in touch.*
      A: Please can you call mum?
      B: *Why please can I call mum?
      B′: *Why can I call mum?

Note that examples (72)–(73) also illustrate that an overt question embedded under meta-*why* cannot straightforwardly be an opaque quotation, or else their ungrammaticality is not predicted.[26]

The evidence in this section shows that full questions or remnants containing wh-words can be spelled out under meta-*why* in a number of languages. We take this as strong support for our claim that meta-*why*-fragments are derived by ellipsis of a ForceP, and that that ForceP must be embedded under an illocutionary act operator, specifically QUESTION.

5.2.1 A brief excursus: languages without meta-*why*-stripping

Let us briefly consider again languages whose meta-*why* equivalent does not derive from the word for *why*, for example Russian. We have suggested that these items are truly non-sentential,

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23 In this section we restrict ourselves to wh-questions because full polar questions under meta-*why* are much harder to get judgements for given their string similarity to non-meta-*why* questions. An anonymous reviewer, however, suggests that they can get a meta-*why* reading for the string *Why is Sally here* in the event that there is a short break, but not a full prosodic boundary, between *why* and the polar question. They also make the point that cliticization of the auxiliary onto meta-*why* is blocked, suggesting that there is some kind of boundary present, whether purely syntactic or both syntactic and prosodic. We thank this reviewer for their observations.

24 A reader may ask if they are licit because the embedded question may be construed as a quotation. However, not all meta-*why*-strips may be construed as quotation and (72)–(73) illustrate that an account based purely on quotation would overgenerate.

25 Note that this string is grammatical if *why* is understood as an exclamative particle, but this is not the intended reading here.

26 Thanks to an anonymous reviewer for highlighting this.

so we would predict that the meta-*why* equivalent in these languages may not appear with an additional non-wh-remnant or a full recapitulation of the question. This is borne out in Russian, as shown in (74), and a sentential response is necessary instead:

(74)   *Russian*[27]
  A: Sally zdes?
    Sally.NOM here
    "Is Sally here?"

  B: A chto (*Sally)?
    PRT what Sally.NOM
    "Why?" [≃Why are you asking me that?]

  B′: A chto tebe Sally s-da-l-a-s'?
    PRT what you.DAT Sally.NOM PRV-give-PST-FEM-REFL
    "Why do you give a toss about Sally?"

Fenno-Swedish is another language in which bare *varför* (lit 'why') cannot be used metacommunicatively and *hur så* (lit. 'how so') is employed instead (Anders Holmberg, p.c.). In Fenno-Swedish, as in Russian, *hur så* cannot participate in *why*-stripping.

(75)   *Fenno-Swedish*
  A: Är Sally här?
    Is Sally here?
    "Is Sally here?"

  B: Hur så (*?Sally)?
    How so (Sally)?
    "Why?" [≃Why are you asking me that?]

However, Holmberg also reports the following exchange to be licit, as it is in the Swedish spoken in Sweden:

(76)   *Fenno-Swedish*
  A: Är Sally här?
  B: Varför Sally? (lit. "Why Sally?")

Holmberg also notes that in the Fenno-Swedish equivalent of our cooking teacher example in (63), a *varför*-strip also behaves like a typical *why*-strip again. Holmberg suggests that "Sally" in B's response in (76) could be a hanging topic, in which case the utterance would contain something like sluicing rather than stripping. However, this does not explain why the metacommunicative intention obtains in (76) when it does not in the absence of the non-*why*-remnant, leading us to conclude that (76) is a case of meta-*why*-stripping. We will return to why (76) is licit while bare meta-*varför* is illicit in Fenno-Swedish in Section 5.3.2.

To return to our main data, having established that ellipsis of an illocutionary question act is the process by which meta-*why*-fragments are derived, we now justify why we believe that the meta-*why* element is an SAP-adjoined modifier of how the utterance entity affects the discourse context.

5.3 A descriptive semantics and pragmatics for meta-why

In this section we further justify our proposed syntax for meta-*why* by describing its meaning and modelling its pragmatic impact. We will not give formal semantic denotations for meta-*why* or for SAP because to fully formalise these would constitute another article in length, but we will make clear what we feel should be the direction of travel for formalising the semantics of these items, and direct readers to existing literature on the relevant concepts as we go.

5.3.1 Modelling meta-why as a discourse-level modifier

A core purpose of this section is to justify the claim made in Section 5.2 that meta-*why* is not simply the wh-word *why* in a high clausal position. Throughout this paper we have indicated

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27 Thanks to David Erschler and Tanya Philippova for judgments and data. Note that it is also the case that *a chto* is not compatible with full overt questions either, unlike meta-*why* (see Section 5.2).

using ≏ that meta-*why* only *approximates* a request for a reason for making some speech act, and that the environments that permit meta-*why* are a subset of the possible environments that typical reason-*why* questions can be used in. We propose that a better paraphrase for meta-*why* is "There's some reason for your question that I'm not understanding", to really capture that the original questioner's intentions *alone* determine the response, rather than any potentially plausible answer to the non-meta-*why* question "Why are you asking me that?", as well as the intuition that these intentions are unknown to the user of meta-*why*. If we test this paraphrase on meta-*why* and "Why are you asking me that?" in their differing contexts, we see that it is licit where meta-*why* is licit ((77) and (80)) and not otherwise:

(77)   A: Is Sally here?
         B: There's some reason for your question that I'm not understanding…

(78)   A: Billy said he was going to the moon.
         B: He said what?
         A: #There's some reason for your question that I'm not understanding…

(79)   *Cookery teacher, to class:*
         a.   How many eggs should I add to the cake, and #there's some reason for my question that I'm not understanding….
         b.   How many eggs should I add to the cake, and why am I asking you this?

(80)   *Context: an outraged parent [B] is telling a friend [A] about discovering an alcoholic beverage in their teenager's bedroom. A says:*
         A: But who were they drinking it with?
         B: There's some reason for your question that I'm not understanding…

This paraphrase reflects the fact that meta-*why* is a non-canonical response to the question by the interlocutor to whom the question is addressed—in short, they do not answer the question. However, while it affects the next steps in the discourse, its use does not reject or represent a refusal to answer the question outright.

Moreover, as we have already shown, meta-*why* is also highly dependent on the prior, currently live discourse move being an open information-seeking question. It can never stand alone from, or precede or anticipate, that question act, whereas locutions like "Why might I be about to ask you X?" are perfectly acceptable. For these reasons, we conceive of meta-*why* as a modifier of a speech act or, more precisely, the modifier of a context-change potential. To progress in this section, we shall first present Krifka's (2014) semantic proposal for illocutionary operators and context change potentials, then discuss how (and to what extent) that kind of proposal presents a plausible way ahead for formalising the meaning of SAP and meta-*why*. We will present some empirical evidence for our proposed meaning for SAP and for meta-*why* being an SAP-level modifier, before demonstrating how these proposed meanings play out in a model of discourse, specifically Farkas & Bruce's (2010) Table model.

Krifka (2014) takes a dynamic approach to speech acts, based on work by Szabolcsi (1982), in which speech acts are an "index changing device" (Krifka 2014: 64). Krifka claims that in making a speech act, the speaker not only expresses an attitude but also takes on certain commitments with respect to the content of that attitude, in the case of an assertion, this is the "liability" that the proposition expressed is true and that evidence can be presented in support of that truth (Krifka 2014: 65). He claims that the production of the speech act results, instantaneously, in an update in the commitment state of the speaker to the effect just described. Commitment states can, however, be modified—Krifka describes cases such as repeated assertions, where the speaker's commitment to the content of the assertion holds from its first production, but repeated instances of the assertion, rather than leading to tautology or redundancy, might instead increase the strength of the commitment of the speaker (Krifka 2014: 65–66).

Speech acts, then, are a different kind of semantic object than we have henceforth been dealing with—they are not truth values (propositions) or sets of truth values (interrogatives); nor are they entities. Instead, they are changes from one index to another, where at the first index a commitment state did not hold but at a second index the commitment state does hold. Krifka

models this for assertions by proposing an assertion operator ASSERT (81) and an operation expressing changes of indices (82), such that the performance of an assertion consists of the process described in (83) (Krifka 2014: 68–69):

(81)   Given an index i, an addressee y, a proposition p and a speaker x, ASSERT "returns TRUE iff at i, x is liable for the truth of the proposition p to the addressee y":
$$ASSERT(i)(p)(y)(x)$$
$$\Leftrightarrow \text{at i, the speaker x is liable for the truth of p at the index i}$$
$$\text{towards the addressee y.}$$

(82) $i' \circ\!\!-\!\!\bullet i \ [F[i]]$
$$\Leftrightarrow_{def} i' \rightarrow i \wedge \neg F[i'] \wedge F[i] \wedge$$
$$\text{for all formulas G such that F and G are logically}$$
$$\text{independent } G[i'] \leftrightarrow G[i]$$
"This expresses a minimal change from i′ to i, consisting in the change of the truth value of the condition F[i]."

(83) $\lambda i \exists i' [i' \circ\!\!-\!\!\bullet i \ [ASSERT(i)(p)(y)(x)]]$
"This proposition is true for all indices i that differ from the immediately preceding i′ only insofar as at i, x is liable towards y for the truth of the proposition p at i."

How does this relate to our proposed SAP-IAP structure? We claim syntactic equivalence between Krifka's ASSERT and our QUESTION operator, which we analysed as located in the head of the illocutionary act phrase (IAP), as they both apply to the propositional content of the clause. However, we do not adopt the exact details of Krifka's proposal, firstly because the output of our operator is an entity and the output of Krifka's is a truth value, and secondly because we will claim that the relevant expression of liability for truth occurs at the next level up; at the SA head. This means that we would have to adapt (82) such that the condition F is defined as the speaker expressing the relevant liability for the truth of the propositional content contained within their utterance act. (We will return to the issue of who takes liability for truth in the case of a question shortly.)

This modified operation of changing indices with specific reference to liability for truth applies at the speech act head, such that an appropriately modified version of the process in (83) reflects the meaning of the SAP, which is where the new index i is introduced. Again, we endorse the core elements of this approach to understanding meta-*why* but the full formal details of these proposals are left for future work.

Based on our proposal that meta-*why* modifies how the original question act has tried to move the discourse forwards, it follows that it must outscope the QUESTION operator and the output of its composition with the propositional content of the question, thereby applying at the SAP level.

The proposal that meta-*why* modifies SAP is empirically attractive as meta-*why* appears to be in complementary distribution with other items that play similar roles and might otherwise appear in this utterance-peripheral position, such as speech act adverbs and exclamative vocatives; cf. Hill (2013: 208–9):

(84)   a.   #Seriously, why?
          b.   #Frankly, why?

(85)   a.   #Goddammit, why?
          b.   #Holy Batman, why?

Note that the strings in both (84) and (85) are in fact licit, but only in the case that *why* is reason- or purpose-*why* rather than metacommunicative. This follows if we assume an analysis for reason- or purpose-*why* such as that in Stepanov & Tsai (2008) or Rizzi (2002), where they sit in ForceP or lower.

The division of labour across these two projections predicts that it should be possible to separate off the utterance act (IAP) from the event of updating the context with the speaker's

commitment (SAP). We can demonstrate this with evidence from Germanic syntax and Korean morphophonology.

In Germanic (and in many other language families), it is perfectly possible for a speaker to perform a root utterance act without committing to the truth of the content of that utterance—in other words, to utter an IAP that is not itself selected by SAP, as in the following examples:

(86)   *English*
        We turn to the next subject for debate: pineapple is a perfectly acceptable pizza topping.

(87)   *German*
        Dass ich Ananas   auf Pizza haben   könnte…
        That I   pineapple on pizza have.INF could
        If I could just have pineapple on pizza…

The examples above show that this typically requires embedding in English, but can be achieved without embedding in languages like German. In (86) the speaker presents a proposition for discussion without necessarily committing to its truth, but that proposition must be embedded within some other context—here the debate context. In (87), in contrast, we have a root verb-final utterance—there is no embedding predicate or preceding discourse—with truth conditions that can be given, but it is not interpreted as an assertion by the speaker (see Truckenbrodt 2006 for more on such utterances). Moreover, in languages like Korean, morphemes that express the illocutionary force of an utterance and those which express who is responsible for committing to the content of the utterance can be realised separately (all examples below from Ceong 2017: 13):

(88)   a.   ∅   Meysi-lul   manna-ss-ta-ko-↘
                     pro Messi-ACC meet-PST-DECL-COMP
                     (I said) I met Messi!

        b.   ∅   Meysi-lul   manna-ss-nya-ko-↘
                     pro Messi-ACC meet-PST-INT-COMP
                     (I'm asking) if you met Messi!   *Speaker is committed*

(89)   a.   ∅   Meysi-lul   manna-ss-ta-ko-↗
                     pro Messi-ACC meet-PST-DECL-COMP
                     (Are you saying) you met Messi?

        b.   ∅   Meysi-lul   manna-ss-nya-ko-↗
                     pro Messi-ACC meet-PST-INT-COMP
                     (Are you asking) if I met Messi?   *Addressee is expected to commit*

In these examples, the clause-typing information, illocutionary force (reinforcement or echo question) and the commitment holder (speaker or addressee) are all marked independently of each other, the last of these being marked by the rising or falling intonation at the end of the utterance.

Finally, recall that overtly-marked illocutionary acts can be embedded, for example in cases of Germanic embedded verb second and English embedded interrogatives, but they do not commit the *current* interlocutors to their truth (Wiklund 2010; Krifka 2014; Woods 2016; Djärv 2019):

(90)   *Swedish* (Djärv 2019: 86)
        Jon sa   att   han hade inte sett filmen.
        Jon said that he   had not seen movie.the
        Jon said that he hadn't seen the movie.
                        The speaker is not committed to the truth of "Jon hadn't seen the movie."

(91)   *English*, British National Corpus,[28] GUM 3337
        They said what did we want to be […] I said a library lady.
                The current addressee is not expected to answer the question "What did we want to be?"

On the basis of these data we claim it is justified to separate off the utterance act from markers of commitment, overt or covert, and from any modification of that commitment, by the current speaker. We achieve this by distinguishing between the IAP and SAP projections, where the SA head selects for an IAP complement. Consequently, we claim that meta-*why* modifies the SAP, not the IAP.

Returning to our description of the semantics and pragmatics of these projections, Krifka (2014: 69) notes that the process in (83) results in an event ("as with index changes in general"). As should be evident from the discussion above, the level at which this happens— and at which we are claiming meta-*why* operates—is one at which we move from true 'semantic' composition to a form of discourse composition, where the nature of the objects being combined and modified moves from (sets of) propositions to discourse entities and events. As a result, we need to think more carefully about how discourse composition might work, and what discourse *modification* would then mean—and specifically for this paper, what meta-*why* modifies with respect to the discourse structure. We will not go deep into detail here but will use a model concerned with the effects on discourse continuations of basic assertions and polar questions (i.e. propositional content embedded under speech act operators), namely that of Farkas & Bruce (2010), to take a first, descriptive, pass at modelling the effect of a meta-*why*-utterance on the discourse continuation. We will also use this model to define the commitments involved in the uttering of a question act. We therefore caveat what follows as being the first step on the road to understanding discourse modification, with plenty of work that must follow up on this.

As alluded to at the start of this section, we believe that a meta-*why* utterance does *not* introduce a new question into the discourse. This might seem like a strange proposal, as meta-*why* utterances start with a "question" word, often have rising intonation and elicit an answer that (as we've discussed extensively) looks a lot like an answer to a reason-*why* question. However, as (77) and (80) illustrate, meta-*why*'s impact is not exactly the same as that of a question—it appears to 'freeze' the context update that the question would normally make at the point of the change where the commitments come to hold, for the specific purposes of clarification and expansion on the motivations behind the speaker's question. We will show how meta-*why* and other wh-questions differ in detail in what follows.

We will model the effect of meta-*why* using Farkas & Bruce's (2010) Table model for discourse. Similarly to Krifka, they treat speech acts as dynamic objects with the potential to update the discourse context. Focusing initially on assertions, they tabulate three changes that a single declarative sentence S[D] makes when asserted in an input context K_i:

(92)   a.   The addition of the propositional content of S[D] to the speaker's *discourse commitments*;

          b.   The addition of the syntactic form and denotation of S[D] to the conversational *Table*, where it becomes the item under discussion (cf. Roberts; Roberts's (1996; 2012) Question Under Discussion stack);

          c.   The addition of the propositional content of S[D] to the *projected set* (cf. the possible second indices in Krifka's system).

Assertions of some proposition are for Farkas and Bruce, therefore, also a function from input context states to output context states, where in the output context states the effects of the three changes above hold. This process is visualised in **Table 1** for the simple root assertion "Sam is home", taken from Farkas & Bruce (2010: 91). In **Table 1**, the input context state K_0 consists of no prior discourse commitments or items on the Table, and the existing common ground (shared information) and projected sets both consist of s_1, the initial common ground at the start of the conversation.

A	Table	B
p	⟨'Sam is home'[D]; p⟩	∅
Common Ground: s_1	Projected Set: $ps_1 = \{s_1 \cup \{p\}\}$	

Note that the projected set in **Table 1** contains only the input projected set and its union with the singleton proposition expressed by S[D]. This is because Farkas and Bruce claim that there are

canonical ways of responding to different types of speech acts, and in the case of assertions of a proposition in the form of a declarative, this is acceptance of that proposition by the addressee. Essentially, "an assertion yields an output context that is categorically biased in favour of confirmation of the asserted proposition" (Farkas & Bruce 2010: 92).

Farkas and Bruce also model the impact of a speech act containing a 'default', or a neutral information-seeking, polar question. Assuming that the denotation of a polar interrogative S[I] is the set $\{p, \neg p\}$, they claim that the update made to an input context K_i by such a speech act is not threefold, but twofold:

(93)   a.   The addition of the syntactic form and denotation of S[I] to the conversational
                Table, where it becomes the item under discussion;
         b.   The addition of the propositional content of S[I] to the projected set.

This differs from an assertion in that there is no addition of propositional content to the speaker's discourse commitments in the case of a question. Note also that in neither assertions nor (polar) questions are speaker or addressee commitments added to the model, though Farkas and Bruce note in a footnote (fn. 12 on page 95) that their model is compatible with adding information such as who the source of the speech act is. We will therefore add the following context changes to (92) and (93) respectively:

(94)   In the event of an assertion, the speaker is committed to being is liable for the truth of
         the proposition denoted by the sentence uttered (cf. Krifka 2014). A proposition with
         this content is added to the speaker's discourse commitments.

(95)   In the event of a polar question, the speaker commits to the addressee being liable
         for the truth of one of the set of propositions denoted by the sentence uttered. A
         proposition with this content is added to the speaker's discourse commitments.

In neither case is this propositional content added to the Table, as these propositions are not directly asserted and therefore cannot be directly challenged.

Returning to polar questions, the canonical projected set contains two members after a question is asked—output contexts containing p, or output contexts containing $\neg p$. This is schematised in *Table 2*, taken from Farkas & Bruce (2010: 95) with our addition from (95).

A	Table	B
B is liable for the truth of their response to ⟨S[I]; $p, \neg p$⟩	⟨'Sam is home'[I]; $p, \neg p$⟩	∅
Common Ground: s_2	Projected Set: $ps_2 = \{s_2 \cup \{p,$ B is liable for truth of $p\}, s_2 \cup \{\neg p,$ B is liable for truth of $\neg p\}\}$	

Table 2 K_2: A asks "Is Sam home?" relative to the initial input context K_0.

The canonical response to a polar question speech act as in *Table 2* is that the addressee B accepts the liability for the true answer, whether p or $\neg p$, and asserts that answer in a similar way to that laid out in *Table 1*. This necessitates an assertion move of some kind which A must then accept, either overtly or tacitly. Only then will the common ground be equal to the relevant member of the projected set indicated in *Table 2*.

Note that this formulation of the discourse means that by answering a question, B commits to the truth of their answer twice; both in accepting the liability that A confers upon them through A's question, and by expressing that answer as an assertion. This is recognised by Farkas and Bruce as they note that while assertions can be accepted tacitly, answers to questions must be overt. We suggest that this tacit-overt distinction falls out from the fact that commitment is expressed multiple times. Following Krifka (2014), multiple expressions of commitment do not result in redundancy but have the effect that the commitment is reinforced in some way, and this would be very difficult to do through silence—silence is not compatible with strong commitment. We also see that acceptance of and proffering of liability for the truth of an answer are separable over the course of a discourse. Consider the following context:

(96)   *A student A approaches the university librarian B.*
          A: Excuse me—do you have a copy of Chomsky 1995 available? The system says
                it is but the shelf is empty.
          B: Let me just check for you.   *Tacit acceptance of liability*
                [Goes away to check]
                Sorry but we don't currently—it's away for repair.   *Overt proffering of liability*

We take examples like (96) to suggest that building multiple expressions of commitment into
the model for questions is in fact on the right track.

Moving on to meta-*why* specifically, it is should be immediately clear how a meta-*why* response
to a question (we will stick here to polar questions) differs from a canonical response in that
it does not assert *p* or ¬*p*. Neither does it place a syntactic form that denotes a full specific
proposition or set of propositions on the Table. In this way, it is similar to constituent questions
such as "Who is Sam?" (cf. Farkas & Bruce 2010: 106), which could also be used as a non-
canonical response to the polar question "Is Sam here?" in the event that the addressee needs
more information in order to fully answer. In a dialogue such as (97), such a constituent question
appears at first glance to play a similar role to meta-*why*, in the sense that the resolution of the
question "Is Sam here?", via canonical or non-canonical means, is paused, as the question "Who
is Sam?" takes its place as the main question currently under discussion:

(97)   A: Is Sam here?
          B: Who is Sam?
          A: The student with the bright green mohawk.
          B: Oh, OK. No, they're not here.

However, while the question about Sam's whereabouts is put on hold because it has been
replaced on the Table by a question about Sam's identity, this is not the same as 'freezing' the
discourse, because B has not challenged A's commitment to B's liability for the true answer to
"Is Sam here?". Indeed, it appears that B has tacitly accepted that liability, even if B does not
address the question "Is Sam here?" immediately. Once B's question "Who is Sam?" is resolved
by A, B returns to resolve A's question "Is Sam here?" in canonical fashion, here by committing
to ¬*p* and pushing the conversation towards a projected set containing the proposition that Sam
is not here. Certainly, if B were to ask "Who is Sam?" and then overtly reject their liability for
the true answer to "Is Sam here?", their behaviour would be interpreted as uncooperative, with
a sense of having 'strung A along':

(98)   A: Is Sam here?
          B: Who is Sam?
          A: The student with the bright green mohawk.
          B: Well, why should I know?

B also cannot use meta-*why* after asking another question of their own. The following exchange
is infelicitous to the point that it is unclear what B's *why* is challenging:

(99)   A: Is Sam here?
          B: Who is Sam?
          A: The student with the bright green mohawk.
          B: #Why?
          B′:   #Why "is Sam here"?
          B″:   #Why Sam?

The infelicity in (99) occurs despite the felicity (if uncooperativity) of B's second utterance in
(98), which is akin to "Why are you asking me…". This shows that the distribution of meta-
why is tightly tied to the point in the discourse at which the addressee's liability needs to be
accepted or rejected—apparently, immediately following the utterance of the question.

Meta-*why* works differently from constituent questions like "Who is Sam?" because rather than
introducing a new *question* onto the table, it is a method of overtly failing to accept liability for
giving the true answer to the speaker's question. It is not, however, an overt rejection either,
but rather a method of reserving or delaying acceptance.

(100)   A: Is Sam here?

      B: Why?

      A: Because I have a meeting with them.

      B: Oh, OK. No, they're not here.

We claim that this effect is derived as follows. Meta-*why* marks removal of B's acceptance of liability from the projected set as projected by B by expressing (though not asserting) a new proposition that B believes there's a reason for the original question that they don't understand. It cannot remove that liability from A's discourse commitments—that would be far too powerful a move and is not directly reflected in the information that meta-*why* conveys.

Remember that the form of the utterance containing meta-*why* contains the original question and is therefore interrogative in form (even in the case where ellipsis has applied and there is no non-*why*-remnant). However, its effect on the discourse is modified such that neither the addition of p nor $\neg p$ to the common ground (via the projected set) constitute canonical responses. What, then, is the canonical response to a meta-*why*-utterance?

Let us first lay out what we claim a meta-*why*-utterance adds to the table (with a small 't'). The projected set will, like an assertion, contain a new proposition. Unlike an assertion, however, the proposition conveyed by meta-*why* is not directly at issue (in the sense of Simons et al. (2010) and cannot be directly challenged, so goes directly into the new projected set and is not added to the Table (with a big 'T'). The original question remains unanswered, but is also not part of the projected set resulting from a meta-*why* utterance. A meta-*why* utterance does not add $\{p, \neg p\}$ to the table again. This is the real 'freezing' effect of meta-*why*, that it stops the content it modifies from being at issue (a little like embedding) but does not add its own at issue content (unlike embedding). What meta-*why* utterances add to the Table, then, is the sentence form meta-*why* plus the material it modifies, without any at-issue propositional content (represented below by the empty set). Given that meta-*why* utterances do, however, add not-at-issue content that must be added to the common ground, and a sentence form whose utterance also needs to be recorded, it still constitutes a discourse move that needs to be dealt with. The resolution of the original question, and the presence of a true answer to it in some projected set, must therefore wait for a further update.

This means that there the canonical response to a meta-*why*-utterance is for A to accept—and they can only do so tacitly—that B believes there's some information that they are missing. We refer to this proposition expressed by B via meta-*why* as q and visualise the use of meta-*why* in response to a polar question "Is Sam here?" in *Table 3*.

A	Table	B
B is liable for the truth of their response to $\langle S[I]$; $p,\neg p\rangle$	⟨'Why~~(Sam is home)~~'[I]; ∅⟩, ⟨'Sam is home'[I]; $p,\neg p\rangle$	q
Common Ground: $s_3 = s_2$	Projected Set: $ps_3 = \{s_2 \cup q\}$	

Table 3 K_3: B responds "Why?" relative to the input context K_2.

The projected set in K_3 is coherent and achievable, in that it is possible and internally consistent. Moreover, the meta-*why* utterance will be removed from the Table after its utterance as it is resolved—there is no propositional content related to it that is on the Table and not in a projected set. The problem is that as A's acceptance of the projected set in *Table 3* must be tacit and so the conversation will stall—there is no prescribed next overt discourse move by either A or B, yet A's unresolved question is still on the Table, their commitment that B should take liability for answering their question is still publicly live (and has not been overtly rejected), and A cannot answer their own question. A therefore has to persuade B to take liability for the answering A's question, which A can do by providing a reason as to why they asked the question. This results in the discourse situation in *Table 4*, where the set projected by A includes both the acceptance of their new assertion and the acceptance by B of liability for the question that is still on the Table. Note that the projected set does *not* contain either p or $\neg p$, because only one discourse move on the Table can be dealt with at any one time (see Farkas & Bruce (2010) for more on the mechanics of this). B will have to accept A's new assertion (their reason for asking the question, here r), before either can return to the question of $\{p,\neg p\}$.

A	Table	B
B is liable for the truth of their response to $\langle S[I]; p, \neg p \rangle$, A is liable for the truth of r, r	$\langle$'I have a meeting with them'[D]; $r \rangle$, $\langle$'Sam is home'[I]; $p, \neg p \rangle$	$\emptyset$
Common Ground: $s_4 = ps_3$	Projected Set: $ps_4 = \{s_4 \cup \{$B is liable for the truth of their response to $\langle S[I]; p, \neg p \rangle$, A is liable for the truth of r, $r\}$	

In *Table 4*, A has tacitly agreed to go with the projected set from *Table 3* so B's discourse commitments are empty. A is still the only discourse participant who is committed to B's liability for the truth of p or $\neg p$ and additionally they are committed to r and to being liable for its truth. The projected set is biased towards future common grounds containing r and A's liability for r, as this is the canonical result of making an assertion. It is also biased towards B accepting liability for the truth of some answer to $\{p, \neg p\}$, as the aim of conversation is to try to make all of public commitments shared ones, and A has not yet indicated that they are happy to drop B's liability for the truth of some answer to $\{p, \neg p\}$, nor have A and B negotiated an agreement to disagree on it.

If B accepts the projected set in *Table 4*, they should then explicitly proffer liability for some true answer to $\{p, \neg p\}$ by asserting p or $\neg p$ as appropriate. Once this is done, A's original question will itself be removed from the Table as either p or $\neg p$ will move into the common ground via the projected set proffered by B.

To summarise this section, we have claimed that meta-*why* is a discourse level modifier that takes a dynamic question speech act object—an utterance event with an interrogative form that projects multiple possible discourse continuations that the addressee is urged to choose between—and modifies what those available discourse continuations are. It does this without adding any new asserted or questioned content to the Table, but (a) by proposing to add a proposition directly to the new projected set that there is some reason for the question that B does not know and (b) by removing B's liability for answering the question from the projected set. This results in no next discourse move being defined, forcing the original questioner to find a way to persuade B to accept liability for the original question, i.e. to clarify why they asked the question.

Before moving on, we would highlight that this proposal groups meta-*why* together with other elements that modify specific types of utterance by altering how they may be responded to or expressing elements of the relationship between the speaker, the addressee and what each wants the other to know or do. This group of elements includes the Romanian particle *oare* briefly discussed in Farkas & Bruce (2010) and Canadian English confirmational *eh* (Wiltschko et al. 2018). Taking the latter as an example, we see how the addition of *eh* to a command modifies its interpretation and the range of felicitous responses to it:

(101)   *Canadian English*, Wiltschko et al. (2018: 583)
      RD: Call me later, eh?
      RD's son: Yeah. Are you going to be at work or?

(102)   RD: Call me later.
      RD's son: OK/?Yeah.

In naturalistic example (101), the command *Call me later* is modified by *eh* such that it additionally requires the addressee to confirm overtly that they agree to comply. As Wiltschko et al. (2018: 582) note, this extra restriction on the discourse "is evidenced by the addressee's response, *yeah,* which would be an infelicitous response to the command." Note that *OK*, a typically felicitous response to a command, is also still possible. What is not felicitous is a failure to respond verbally by the addressee, which is typically a perfectly appropriate response to commands in general.

Another example of using particles to modify speaker commitment involves the use of response particles like *yes* and *no* to express whether the speaker believes a previous speech act to be

a valid one in the discourse context, as discussed by Wiltschko (2018).[29] Using a very similar approach to speech act syntax to the one used in this paper, Wiltschko proposes that responses in discourses like (103) have the structure in (104):

(103) B: Why is joining Basic Black so important to me?
       M: Yes, please tell me Brady, because I really want to know.

<div align="right">Taken from Wiltschko (2018: 254)[30]</div>

(104) [$_{XP}$ Yes [$_{GroundP}$ [GROUND-S] [$_{Ground'}$ [$_{Ground}$] [$_{CP}$ ~~Why is joining Basic Black so important to you~~]]]] Please tell me…

<div align="right">Adapted from Wiltschko (2018: 264)</div>

To translate Wiltschko's terms into those used here, GroundP encodes the commitment of the speaker towards the propositional content and takes the typed clause (in Wiltschko's terms, CP, in ours, ForceP) as its complement. Abstracting away from details such as the identity of the IA/Ground head, and Wiltschko's inclusion of an an abstract argument GroundS (referring to the speaker's attitudes) in SpecGroundP, the structure proposed for *yes* as a validator of a speech act is very similar to that which we propose here for meta-*why*, which encodes the user's recognition that there is a non-shared reason for uttering an information-seeking question (and therefore implicitly questions its validity). It really does seem, therefore, that not only is the speech act syntax enterprise on the right lines, but that there is a whole class of discourse elements to which meta-*why* belongs and which is yet to be fully explored formally.

5.3.2 More on the focus properties of meta-*why*

One last step is to account for the effect of meta-*why*'s focus-association properties, as laid out in Section 3, and address how bare and non-bare meta-*why*s compare.

Let us assume that, with meta-*why* in SpecSAP, the focused non-wh-remnant in meta-*why*-stripping moves to SpecIAP. This is far above the typical focus positions in Cartographic approaches such as Rizzi (1997; 2002) *inter alia* and much of the material in this space is not compatible with a focal interpretation, e.g. discourse particles (cf. Zimmermann 2011; Ott & Struckmeier 2018 i.a.). Indeed, as we have been claiming, these projections are concerned with interlocutor relationships and attitudes towards propositions rather than propositional material itself. However, the meaning of meta-*why*-strips and typical *why*-strips differ in exactly that respect. A meta-*why*-strip asks for the reason why the question contains the content of the non-wh-remnant (i.e. why that specifically is important to the speaker in contrast to all other relevant things that they could ask about), whereas a typical *why*-strip contrasts the content of the non-wh-remnant with some other possible content of the same type independent of any speaker motivation or interest. Let us consider the following near-minimal pair, where (105) is taken from Gavin Lyall's novel *The Crocus List*:

(105) **Meta-*why*-strip**
       "Why [did they want to kill] Barling?"
       "He was an expert on Russian affairs […]."
       "Where did he stand on Berlin?"
       "Why Berlin?" George asked suspiciously.
       "Miss Tuckey told us to look for a narrow objective within a broader attack. Berlin seems the most immediate."   BNC, HR4

(106) **Typical *why*-strip**
       A: Barling took a stance on Berlin.
       B: Why Berlin?

In (105), the strip is understood as meaning something like *What's your interest in knowing about his stance on Berlin?* rather than *Why did Barling take a stance on Berlin as opposed to some other issue?* Although the overt non-wh-remnant only consists of *Berlin* in (105), the contrast that is

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set up here is between the question asked about Berlin and the set of all other questions that the speaker might have asked (indeed, utterances that they might have uttered). In (106), the contrast that emerges is between *Berlin* and the set of other issues that Barling might take a stance on. In other words, meta-*why*-strips always query some focused element relative to all the utterances that a speaker might make, rather than relative to other possible propositions. This motivates the proposal that the non-wh-remnant in meta-*why*-strips moves to a projection concerning interlocutor attitudes (the structure of the discourse) rather than one concerning the information structure of the proposition.

This approach to focus finds some support from Zimmermann (2008: 348–349), who argues that analyses of contrastive focus should take into account "the speaker's assumptions about what the hearer considers to be likely or unlikely [and] contain [information] on the background assumptions of speaker and hearer" on the basis of the variable realisation of contrastive focus in a range of languages. Zimmermann argues that focus marking, whether by intonational or morphological means, appears to be mediated by the speaker's judgment on whether the hearer will expect the focus content based on the common ground that they share (Zimmermann 2008: 354–355). What meta-*why*-strips appear to do is mark that the utterer of the meta-*why*-strip, the original addressee, does *not* share the common ground required to, in their opinion, adequately answer the original question, but knows that some information exists that the original speaker has not yet shared (given that they asked a question with this content in the first place).

By proposing that the non-wh-remnant in meta-*why*-strips moves into the discourse layer, we can also account for the fact that typical *why*-strips are contingent on ellipsis, i.e. never permit full spell out of the ellipsis site, while meta-*why*-strips do permit full reproduction of the original ForceP.[31] The clause or utterance itself cannot be in focus in a typical *why*-strip because both the focus position and the *why* remnant are lower than the discourse-structural positions. In other words, they are themselves part of the propositional structure. In contrast, meta-*why* and the non-wh-remnant in a meta-*why*-strip are above ForceP so ForceP can be taken as the largest non-*why*-remnant. This predicts that material that is base-generated in IAP or SAP, e.g. the highest types of speech act adverb, should not be able to be part of the non-*why*-remnant in a meta-*why*-strip, and this appears to be borne out.

(107)   A: Seriously, who did you see last night?
         B: Why (*seriously) who did I see last night?

The focus association property of meta-*why* also helps us (tentatively) explain the paradoxical data from Fenno-Swedish as outlined in Section 5.2.1. Recall that the equivalent of bare meta-*why*, *hur så* (lit. 'how so?') did not participate in meta-*why*-stripping, and *varför* ('why') could not be used in its bare form, but the meta-*why*-strip *Varför Sally?* ('Why Sally?') is permitted. Both bare *varför* and meta-*varför*-stripping are available in the Swedish spoken in Sweden, whereas Finnish, the majority language of the communities in which Fenno-Swedish speakers tend to live, has a meta-*why* equivalent *miten niin* that also literally means 'how so?' and does not permit meta-*why*-stripping.[32] We assume that contact with Finnish has influenced Fenno-Swedish's bare meta-*why*, but that meta-*varför*-stripping persists as long as the non-wh-remnant is overt, presumably because there is some structural difference between *hur så* and meta-*varför*, both of which are present in and reinforced in the input from both languages that make up the language repertoire of Fenno-Swedish speakers. We make no further speculations about the nature of language contact in Fenno-Swedish, or exactly how it would result in the 'dual approach' to metacommunicative acts that we see in Fenno-Swedish.

However, this leads us to query whether bare meta-*why* in languages like English and German is subject to the same ellipsis mechanism as meta-*why*-stripping, or whether it is plausibly a different, non-sentential, element as per Ginzburg (2012). We claim that bare meta-*why* still results from this stripping-like ellipsis mechanism for three reasons. Firstly, we still need to account for its restriction to 'freezing' interrogatively-typed information-seeking questions.

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31   With respect to whether meta-*why* plus a full overt question involves focus-movement of the ForceP plus ellipsis, or whether everything simply remains in situ, we think that both options are possible depending on the interpretation intended by the utterer of meta-*why*, in other words, why they are querying the original questioner's utterance. This is a point on which intonational analysis would definitely bring insights to bear, so we leave this for future research.

32   Thanks, once again, to Anders Holmberg for the Finnish data.

Secondly, recall that the meaning of meta-*why* does not change from bare to stripping contexts, unlike other speech act modifiers and particles. For example, Canadian *eh* can appear as a standalone utterance, but it loses its confirmational meaning and is only interpretable as a request to repeat the preceding utterance (Wiltschko & Heim 2016: 309). The same holds for *huh* and *right*, while other discourse particles like those in German cannot stand alone at all (Ott & Struckmeier 2018: 396). Thirdly, recall that in Yoshida et al.'s (2015) account of typical *why*-stripping, the focus-associated movement was driven by ellipsis and not vice versa. We therefore claim that bare meta-*why* is also a product of meta-*why*-stripping, simply without the focus-associated remnant. Its high position is further confirmed by the absence of pair-list answers to bare meta-*why*, just like in meta-*why*-strips (cf. (56) in Section 3).

(108)   **Lack of scope ambiguity: bare meta-*why***
     A: Does everyone hate John?
     B: Why? [≐ why are you asking me that?]
     A: Because you know him well and might be able to confirm what I'm hearing about him.
     A′:   #Because Tom said he's rude and Mary said… and James said…

6 Conclusion

We have shown that meta-*why*-fragments are fragments of sentential utterances, contra Ginzburg (2012), on the basis of their interaction with illocutionary force and clause type, as well as meta-*why*'s compatibility with overt material as large as full wh-questions. We proposed a brief ontology of *why*-questions based in part on Koura (1988) and Bromberger (1992), in which we claim that meta-*why* differs from reason- and purpose-*why*s in terms of the conversational backgrounds that determine possible answers. In the case of possible answers to meta-*why*. they are contained within the conversational background of the speaker alone, specifically those parts of the speaker's conversational background that are not already shared with any of the other discourse participants. We build this into our understanding of meta-*why* by sketching its impact on how discourse is constructed using Farkas & Bruce's (2010) Table model and through its structure in a modern speech act syntactic framework. We appealed to an extended speech act structure to locate meta-*why* as a modifier of SpeechActP, the highest possible projection in a root clause, and demonstrated how the ellipsis mechanism at work in meta-*why*-fragments is very similar to that at work in *why*-stripping. The account given here provides support for the postulation of speech act projections in syntax and the division of labour that they share with respect to clause typing and illocutionary force, as well as elements that modify how the utterance may be interpreted and responded to by other discourse participants.

Abbreviations

3RD = third person, ACC = accusative, COMP = complementiser, CP = Complementiser Phrase, DAT = dative, DECL = declarative, DP = Determiner Phrase, FEM = feminine, FinP = Finiteness Phrase, FUT = future, IAP = Illocutionary Act Phrase, INF = infinitive, INT = interrogative, IntP = Interrogative Phrase, NOM = nominative, PRES = present, PRT = particle, PRV = preverb, PST = past, REFL = reflexive, SAP = Speech Act Phrase, SG = singular, TP = Tense Phrase

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References

Austin, John L. 1962. *How to do things with words*. Cambridge, MA: Harvard University Press.

Bromberger, Sylvain. 1992. *On what we know we don't know*. Chicago, IL: The University of Chicago Press.

Ceong, Hailey Hyekyeong. 2017. First- and second-hand speech contrasts as a syntactic domain: The grounding spine. *Slides from a talk presented at the Workshop at the 12th Biannual Meeting of the Association of Typology at the Australian National University in Canberra*, December 15 2017.

Ceong, Hailey Hyekyeong. 2019. *The morphosyntax of clause typing: Single, double, periphrastic, and multifunctional complementizers in Korean*. Victoria, BC: University of Victoria dissertation.

Chung, Sandra. 2006. Sluicing and the lexicon: The point of no return. In Rebecca T. Cover & Yuni Kim (eds.), *Proceedings of Berkeley Linguistics Society Annual Meeting 31: General session and parasession on prosodic variation and change*, 73–91. Berkeley, CA: Berkeley Linguistics Society.

Chung, Sandra. 2013. Syntactic identity in sluicing: How much and why. *Linguistic Inquiry* 44(1). 1–44. DOI: *https://doi.org/10.1162/LING_a_00118*

Cinque, Guglielmo. 1999. *Adverbs and functional heads: a cross-linguistic perspective*. Oxford: Oxford University Press.

Coniglio, Marco & Iulia Zegrean. 2012. Splitting up force: Evidence from discourse particles. In Lobke Aelbrecht, Liliane Haegeman & Rachel Nye (eds.), *Main Clause Phenomena: New Horizons*, 229–256. Amsterdam: John Benjamins. DOI: *https://doi.org/10.1075/la.190.10con*

Cooper, Robin. 2005. Austinian truth in Martin-Löf type theory. *Research on Language and Computation* 3(4). 333–362. DOI: *https://doi.org/10.1007/s11168-006-0002-z*

Cooper, Robin. 2011. Type theory and semantics in flux. In Ruth Kempson, Nicholas Asher & Tim Fernando (eds.), *Handbook of the Philosophy of Science, Volume 14: Philosophy of linguistics*, Amsterdam: Elsevier. DOI: *https://doi.org/10.1016/B978-0-444-51747-0.50009-3*

Djärv, Kajsa. 2019. *Factive and assertive attitude reports*. Philadelphia, PA: University of Pennsylvania dissertation.

Farkas, Donka F. & Kim B. Bruce. 2010. On reacting to assertions and polar questions. *Journal of Semantics* 27. 81–118. DOI: *https://doi.org/10.1093/jos/ffp010*

Ginzburg, Jonathan. 2012. *The interactive stance: Meaning for conversation*. Oxford: Oxford University Press. DOI: *https://doi.org/10.1093/acprof:oso/9780199697922.001.0001*

González i Planas, Francesc. 2014. On quotative recomplementation: Between pragmatics and morphosyntax. *Lingua* 146. 39–74. DOI: *https://doi.org/10.1016/j.lingua.2014.04.007*

Gunlogson, Christine. 2001. *True to form: Rising and falling declaratives as questions in English*. Santa Cruz, CA: University of California Santa Cruz dissertation.

Haegeman, Liliane & Virginia Hill. 2013. The syntacticization of discourse. In Raffaella Folli, Christina

Sevdali & Robert Truswell (eds.), *Syntax and its limits*. Oxford: Oxford University Press. DOI: *https://doi.org/10.1093/acprof:oso/9780199683239.003.0018*

Heycock, Caroline. 2006. Embedded root phenomena. In Martin Everaert & Hans van Riemsdijk (eds.), *The Blackwell Companion to Syntax, Volume II*, 174–209. Oxford: Blackwell. DOI: *https://doi.org/10.1002/9780470996591.ch23*

Hill, Virginia. 2007a. Romanian adverbs and the pragmatic field. *The Linguistic Review* 24. 61–86. DOI: *https://doi.org/10.1515/TLR.2007.003*

Hill, Virginia. 2007b. Vocatives and the pragmatics-syntax interface. *Lingua* 117. 2077–2105. DOI: *https://doi.org/10.1016/j.lingua.2007.01.002*

Hill, Virginia. 2013. *Vocatives: How syntax meets with pragmatics*. Leiden: Brill. DOI: *https://doi.org/10.1163/9789004261389*

Hooper, Joan & Sandra A. Thompson. 1973. On the applicability of root transformations. *Linguistic Inquiry* 4. 465–497.

Katz, Graham, Paul Portner & Aynat Rubenstein. 2012. Ordering combination for modal comparison. In Anca Chereches (ed.), *Proceedings of SALT 22*, 488–507. DOI: *https://doi.org/10.3765/salt.v22i0.2647*

Koura, Antti. 1988. An approach to why-questions. *Synthese* 74(2), *Knowledge-seeking by questioning part II*, 191–206. DOI: *https://doi.org/10.1007/BF00869552*

Kratzer, Angelika. 1981. The notional category of modality. In Hans-Jürgen Eikmeyer & Hannes Rieser (eds.), *Words, worlds and contexts: New approaches in word semantics*, 38–74.

Kratzer, Angelika. 1991. Modality. In Arnim von Stechow & Dieter Wunderlich (eds.), *Semantik: Ein internationales Handbuch zeitgenoessischer Forschung*, 639–650. Berlin: De Gruyter. DOI: *https://doi.org/10.1515/9783110126969.7.639*

Kratzer, Angelika. 2012. *Modals and conditionals*. Oxford: Oxford University Press. DOI: *https://doi.org/10.1093/acprof:oso/9780199234684.003.0004*

Krifka, Manfred. 2014. Embedding illocutionary acts. In Tom Roeper & Margaret Speas (eds.), *Recursion: Complexity in cognition*, 59–88. Heidelberg: Springer. DOI: *https://doi.org/10.1007/978-3-319-05086-7_4*

Krifka, Manfred. 2021. Layers of assertive clauses: Propositions, judgements, commitments, acts. In Jutta M Hartmann & Angelika Wollstein (eds.), *Propositionale Argumente im Sprachvergleich: Theorie und Empirie [Propositional arguments in cross-linguistic research: Theoretical and empirical issues]*. Tübingen: Narr.

Lahiri, Utpal. 2002. *Questions and answers in embedded contexts*. Oxford: Oxford University Press.

Lam, Zoe. 2014. A complex ForceP for speaker- and addressee-oriented particles in Cantonese. *Studies in Chinese Linguistics* 35(2). 61–80.

Mascarenhas, Salvador. 2009. Complementizer doubling in European Portuguese. Online Ms., New York University. Retrieved 3rd March 2014 from *https://files.nyu.edu/sdm330/public/docs/mascarenhas.pdf*.

Merchant, Jason. 2010. Three kinds of ellipsis. In François Recanati, Isidora Stojanovic & Neftali Villanueva (eds.), *Context-dependence, perspective and relativity*, 141–192. Berlin: Walter de Gruyter.

Merchant, Jason. 2013. Voice and ellipsis. *Linguistic Inquiry* 44(1). 78–108. DOI: *https://doi.org/10.1162/LING_a_00120*

Ott, Dennis & Volker Struckmeier. 2018. Particles and deletion. *Linguistic Inquiry* 49(2). 393–407. DOI: *https://doi.org/10.1162/LING_a_00277*

Pesetsky, David. 1997. Some optimality principles of sentence pronunciation. In Pilar Barbosa, Danny Fox, Paul Hagstrom, Martha McGinnis & David Pesetsky (eds.), *Is the best good enough?*, 337–383. Cambridge, MA: MIT Press.

Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane Haegeman (ed.), *Elements of grammar: Handbook of generative syntax*, 281–337. Dordrecht: Springer. DOI: *https://doi.org/10.1007/978-94-011-5420-8_7*

Rizzi, Luigi. 2002. On the position "Int(errogative)" in the left periphery of the clause. In Guglielmo Cinque & Giampaolo Salvi (eds.), *Current studies in Italian syntax. Essays offered to Lorenzo Renzi*, Amsterdam: North Holland.

Roberts, Craige. 1996. Information structure in discourse: Towards an integrated formal theory of pragmatics. In James Yoon & Andreas Kathol (eds.), *OSU Working Papers in Linguistics 49: Papers in semantics*, 91–136. Columbus, OH: Ohio State University.

Roberts, Craige. 2012. Information structure in discourse: Towards an integrated formal theory of pragmatics. *Semantics and Pragmatics* 5. 1–69. DOI: *https://doi.org/10.3765/sp.5.6*

Ross, John R. 1970. On declarative sentences. In Roderick Jacobs & Peter Rosenbaum (eds.), *Readings in English transformational grammar*, 272–277. Boston, MA: Ginn.

Searle, John R. 1976. A classification of illocutionary acts. *Language in Society* 5(1). 1–23. DOI: *https://doi.org/10.1017/S0047404500006837*

Simons, Mandy, Judith Tonhauser, David Beaver & Craige Roberts. 2010. What projects and why. In Nan Li & David Lutz (eds.), *Proceedings of SALT 20*, 209–327. DOI: *https://doi.org/10.3765/salt.v20i0.2584*

Speas, Peggy & Carol Tenny. 2003. Configurational properties of point of view roles. In Anna Maria

DiSciullo (ed.), *Asymmetry of Grammar, Volume 1: Syntax and semantics*, 315–344. Amsterdam: John Benjamins. DOI: *https://doi.org/10.1075/la.57.15spe*

Stepanov, Arthur & Wei-Tien Dylan Tsai. 2008. Cartography and licensing of *wh*-adjuncts: A cross-linguistic perspective. *Natural Language and Linguistic Theory* 26(3). 589–638. DOI: *https://doi.org/10.1007/s11049-008-9047-z*

Suñer, Margarita. 1993. About indirect questions and semi-questions. *Linguistics and Philosophy* 16. 45–78. DOI: *https://doi.org/10.1007/BF00984722*

Szabolcsi, Anna. 1982. Model theoretic semantics of performatives. In Ferenc Kiefer (ed.), *Hungarian Linguistics*, 515–535. Amsterdam: John Benjamins. DOI: *https://doi.org/10.1075/llsee.4.16sza*

Taniguchi, Ai. 2017. *The formal pragmatics of non-at-issue intensification in English and Japanese*. East Lansing, MI: Michigan State University dissertation.

Truckenbrodt, Hubert. 2006. On the semantic motivation of syntactic verb movement to C in German. *Theoretical Linguistics* 32(2/3). 257–306. DOI: *https://doi.org/10.1515/TL.2006.018*

Villa-García, Julio. 2015. *The syntax of multiple-que sentences in Spanish: Along the left periphery*. Amsterdam: John Benjamins. DOI: *https://doi.org/10.1075/ihll.2*

Wiklund, Anna-Lena. 2010. In search of the force of dependent verb second. *Nordic Journal of Linguistics* 33(1). 81–91. DOI: *https://doi.org/10.1017/S0332586510000041*

Wiltschko, Martina. 2018. Response particles beyond answering. In Laura R. Bailey & Michelle Sheehan (eds.), *Order and Structure in Syntax I: Word order and syntactic structure*, 241–280. Berlin: Language Science Press.

Wiltschko, Martina, Derek Denis & Alexandra D'Arcy. 2018. Deconstructing variation in pragmatic function: A transdisciplinary case study. *Language in Society* 47. 569–599. DOI: *https://doi.org/10.1017/S004740451800057X*

Wiltschko, Martina & Johannes Heim. 2016. The syntax of confirmationals: A neo-performative analysis. In Günther Kaltenböck, Evelien Keizer & Arne Lohmann (eds.), *Outside the clause: Form and function of extraclausal constituents*, 303–340. Amsterdam: John Benjamins. DOI: *https://doi.org/10.1075/slcs.178.11wil*

Woods, Rebecca. 2016. *Investigating the syntax of speech acts: Embedding illocutionary force*. York, UK: University of York dissertation.

Woods, Rebecca. 2021. Towards a model of the syntax–discourse interface: a syntactic analysis of please. *English Language & Linguistics* 25(1). 121–153. DOI: *https://doi.org/10.1017/S1360674319000510*

Yoshida, Masaya, Chizuru Nakao & Iván Ortega-Santos. 2015. The syntax of *why*-stripping. *Natural Language and Linguistic Theory* 33. 323–370. DOI: *https://doi.org/10.1007/s11049-014-9253-9*

Zimmermann, Malte. 2008. Contrastive focus and emphasis. *Acta Linguistica Hungarica* 55(2–4). 347–360. DOI: *https://doi.org/10.1556/ALing.55.2008.3-4.9*

Zimmermann, Malte. 2011. Discourse particles. In Claudia Maienborn, Klaus von Heusinger & Paul Portner (eds.), *Semantics: An international handbook of natural language meaning*, 2011–2038. Berlin: Mouton de Gruyter.