This is an original manuscript of an article published by Taylor F&Francis: Linguistic Variation 19(2): 352-385 (2019).https://doi.org/10.1075/lv.18002.

Basque question particles: Implications for a syntax of discourse particles

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Abstract. In this paper, we focus on the syntax of question particles in Basque and provide an account that draws new parallels between the syntactic behavior of discourse particles in Basque and some recent findings that have been reported for the German language, perhaps the most studied language of all when it comes to discourse particles. In particular, after having argued for a syntactic perspective on discourse particles, we deal with Basque particles in both *wh*-questions and polar questions. For *wh*-questions, we provide evidence for the claim that the particle *ote* occupies a IP-/TP-internal particle position and, if attaching to a *wh*-element, can serve to form emphatic questions of the type that have also been proposed for German. In the context of polar questions, we demonstrate that there are two distinct positions for discourse particles in central and eastern dialects of Basque: one inside the IP/TP-domain and one in the left periphery of the clause. Again, we indicate relevant cross-linguistic parallels, thereby dealing with Basque discourse particles from the perspective of a cross-linguistic syntax of particle elements.

Keywords: Basque; discourse particles; German; questions; syntax;

1. Introduction

Basque is known for its unique position within the languages of Europe and its typologically challenging role as a language isolate, and Basque is also known for its rich microvariation. Although there is much work on the syntax of Basque dialects and its cross-linguistic implications, only very few formal linguistic studies paid attention to the fact that Basque, like many European languages, has an inventory of discourse particles in its varieties (see de Rijk 2008 for an exception).

This paper presents a syntactic approach to Basque discourse particles in questions. We focus on the syntax of question particles because in this case, as we argue, the varieties of Basque display two different syntactic positions for discourse particles – one below and one encoded in the clausal left periphery. Interestingly, some of the syntactic patterns we find in the domain of Basque discourse particles support recent claims that even in languages like German, discourse particles in questions can appear in the clausal left periphery, violating the general rule that particles in German are stuck in a clausal position below the left periphery. We will proceed as follows.

In Section 2, we will first introduce the syntactic perspective on discourse particles, given that this topic receives a lot of attention in the semantics/pragmatics literature and not so much in formal syntax. We will base our introduction on observations on German, maybe the most studied language of all when it comes to discourse particles, and we will point out that discourse particles must be considered distinct syntactic elements and cannot be grouped together with their close relatives, that is, with higher adverbs. Several syntactic facts in the domain of coordination and word order, for instance, support such a claim. After having established the distinct syntactic status

of discourse particles, we will briefly indicate that from a cross-linguistic perspective it makes sense to assume that discourse particles have (at least) two syntactic positions within the functional hierarchy of the clause: one below the left periphery and one encoded within the clausal left periphery.

In Section 3, we will turn to discourse particles in Basque questions. We will first sketch some basic properties of the Basque clause and then focus on particles in questions in more detail. In particular, we will first focus on Basque particles in *wh*-questions and, in this context, discuss the different syntactic positions the particle *ote* (< Latin *aut ne* 'or not' de Rijk 2008; see Alcázar 2017 for a recent corpus collection) can occupy. Interestingly, *ote* can attach both to inflected verbs and to *wh*-elements. In the latter use, the co-constituency of particle and *wh*-element and the corresponding movement operations yield emphatic questions. We will connect this observation to similar findings that have recently been formulated for exceptional particle uses in the domain of German question particles. Having accounted for the syntactic behavior of *ote* in *wh*-questions, we will finally turn to the particles *al* (central dialect) and *-a* (eastern dialects) in polar questions, and we will discuss how their syntactic behavior can be accounted for given what we have proposed for different positions of *ote* in *wh*-questions.

Section 4 summarizes and concludes the paper by sketching to what extent the microvariation in the use of discourse particles in Basque can teach us some aspects of the syntax of discourse particles that hold cross-linguistically.

2. Discourse particles from a syntactic perspective

According to a classical tradition, grammar is to be distinguished from language use. On the one hand, there is propositional syntax and truth-conditional semantics; on the other hand, there is pragmatics dealing with meaning in context, that is, performed language. This strict division has its methodological advantages (Chomsky 1965), but it appears to be at odds with various insights that have been accumulated especially over the last two decades in syntactic theory. These insights point to the conclusion that the full interpretation of sentences and in particular its illocutionary component is far more determined by central syntactic and semantic principles than previously thought (see Rizzi 1997 and subsequent work). While hardly anyone would subscribe to the view that illocutionary force (i.e., performing a question, an assertion, etc.) is unrelated to syntactic structure, it is not (yet) quite clear how close the relation is (see Truckenbrodt 2006 for an elaborated account).

Discourse particles as they are found in many languages and their syntactic behavior can provide a window through which we can view and determine how close the connection between illocutionary-meaning components and syntactic mechanisms really is. Discourse particles have been attested in a wide range of languages (e.g., Dutch, German, Greek, Finnish, Hungarian, Mandarin, Japanese, and many others; see, e.g., Zimmermann 2011 for an overview).

Let us consider an example. In English, for instance, (1) is ambiguous between an information-seeking and a rhetorical question. If one considers merely the surface syntactic string, disambiguation seems to be the result of inference:

(1) Who likes drinking cold coffee?

However, in German, a language that is known for its rich inventory of discourse particles, an

information-seeking question and a rhetorical one can be distinguished quite easily, since German inserts particles forcing the rhetorical reading, compare (2a) and (2b):

(2) a. Wer trinkt gerne kalten Kaffee?
who drinks with.pleasure cold coffee
'Who likes drinking cold coffee?'
b. Wer trinkt schon gerne kalten Kaffee?
who drinks PART with.pleasure cold coffee
'After all, who likes drinking cold coffee? (Nobody!)'

Due to *schon* (lit. 'already'), (2b) cannot be interpreted as an information-seeking question. We thus see that discourse particles can play a central role in the formation of utterance meaning. They turn basic sentence types such as questions into more fine-grained types such as rhetorical questions, etc.

Now, one could in principle argue that elements like *schon* do not teach us much about syntactic operations as connected to illocutionary force. A prominent strand of research in semantics/pragmatics in fact argues that discourse particles connect to syntax only indirectly. In particular, many approaches assume that such particles merely constrain the context in which an utterance is felicitous by acting as (truth-conditionally vacuous) presupposition triggers (e.g., Egg & Zimmermann 2012; Grosz 2014) or as meaning contributions at a separate 'expressive' or 'use-conditional' level (Kratzer 1999; Potts 2007; Rojas-Esponda 2014; Gutzmann 2015).

In this paper, we will try to show that, despite the substantial progress that has been made in semantic/pragmatic approaches to discourse particles, a syntactic perspective is nevertheless worth pursuing. According to such a syntactic view, discourse particles are modifiers of some left peripheral operator – be it a speech-act (e.g., Waltereit 2001; Haegeman 2014) or a sentence-type operator (e.g., Zimmermann 2008). In what follows, we will first turn to the case of German and point out that discourse particles must be considered distinct syntactic elements and, from a syntactic point of view, cannot be grouped together with closely related elements (in the case of German: higher adverbs). After having established the distinct syntactic status of discourse particles, we will then turn to discourse particles in Basque questions in Section 3.

2.1 Discourse particles are syntactically distinct from their close relatives

Recent syntactic literature on German (but also on Italian) has focused on the (historically) close relationship between discourse particles and sentence adverbs and argues that discourse particles can be classified as 'deficient' sentence adverbs (i.e., as weak or clitic elements in the sense of Cardinaletti & Starke 1999; see, e.g., Cardinaletti 2011, 2015). According to this view, discourse particles can be derived from more general constraints that also hold for sentence adverbs. At first sight, this claim is corroborated by some properties of discourse particles that are often discussed in the syntactic literature on particles. More specifically, particles share with higher adverbs that they cannot appear in the surface scope of sentential negation (3) and that they can combine with other elements of the same type (4); German examples from Grosz (2016a: 4):

(3) a. Das ist {**ja**} nicht {***ja**} seine Schuld.
that is PART not PART his fault
'That isn't his fault (as you and I know).'

b. She {probably} hasn't {*probably} left.

(4) a. Da hat **ja** **wohl** der Lehrer versagt.
there has PART PART the teacher failed
'This is a case where the school teacher failed.'
b. Unfortunately, I obviously didn't do that.

However, there are also differences that set German discourse particles apart from sentence adverbs as far as only syntactic properties are concerned. First, as shown in (5), discourse particles cannot be coordinated (5a), while sentence adverbs do not obey such a constraint (5b); example gathered via Google search:[1]

(5) a.* Da hat **ja** und **wohl** der Lehrer versagt.
there has PART and PART the teacher failed
'This is a case where the school teacher failed.'
b. Das ist eine Entwicklung, die Sie fördern und für die Sie heute **leider** und **unglücklicherweise** [...]Verbündete bei der SPÖ finden.
that is a development which you encourage and for that you today unfortunately and unfortunately allies at the SPÖ find
'That is a development which you encourage and for which, unfortunately, you find allies in the SPÖ party nowadays.'
<https://www.parlament.gv.at/PAKT/VHG/XXI/NRSITZ/NRSITZ_00049/SEITE_0115.html>

Another syntactic property of discourse particles that sets them apart from sentence adverbs and that will play an important role in the rest of the paper is exemplified in (6) and (7). For German, it is generally assumed that discourse particles are restricted to the so-called middle field (i.e., the IP/TP-domain of the clause). To see this, consider the following minimal pair involving the adverb/particle homonym *vielleicht* (lit. 'perhaps'); capitals indicate heavy stress (see Bayer & Trotzke 2015: 14):

(6) a. Die ist **vielleicht** SCHLAU. [adverb reading]
this.FEM is perhaps smart
'This one (e.g., a student) is perhaps smart (but I don't know yet).'
b. **Vielleicht** ist die SCHLAU.
'Perhaps, this one is smart.'

(7) a. DIE ist **vielleicht** schlau! [particle reading]
this.FEM is PART smart
'My god, how smart this one (e.g., a student) is!'
b. * **Vielleicht** ist DIE schlau!
(intended: particle reading; i.e., same as [8a])

[1] Note that focus particles, another closely related word class, pattern with sentence adverbs and crucially not with discourse particles in that they can also be conjoined (see Grosz 2016a: 5 for some data). This can be taken as further evidence that discourse particles feature a syntax of their own.

We see that only the adverb *vielleicht* (6), and not the corresponding particle (7), can occur in the left periphery of the clause.

All in all, even if we only look at German discourse particles, there is good reason to assume that the syntactic behavior of discourse particles cannot be captured in terms of syntactic constraints we observe for closely related word classes. Rather, discourse particles seem to display dedicated requirements in their syntactic distribution. Let us now turn to the question of how a syntax of discourse particles can account for the role of particles that they play in indicating and/or modifying the illocutionary force of an utterance.

2.2 The connection to illocutionary force

Discourse particles exhibit two central properties that seem to hold cross-linguistically: they depend on their respective sentence types and they only occur in root clauses or embedded clauses that clearly display root-like properties. Given what we saw above for German particles, this is rather surprising. Note that in syntactic theory, a standard assumption is that sentence typing and illocutionary force are meaning components that belong to the upper left clausal periphery, that is, to the CP-domain of the clause (see Rizzi 2014, 2017 for recent overviews). However, as we saw above (at least for German), discourse particles do not occur in the left periphery of the clause but rather in a position that is arguably lower, that is, within the IP/TP zone of the clause. Accordingly, the question arises how discourse particles can connect to the CP-domain in a way that is compatible with their structural position in the middle field.

It is crucial to see that often the C^0 head and the particle are non-adjacent because topical material can intervene (see Grosz 2016b on this 'watershed' function of discourse particles to mark the boundary between topical and focal material in the clause):

(8) Wer [$_C$ trinkt] im Bibliothekscafé [$_{Prt}$ schon] gerne kalten Kaffee?
who drinks in.the library.café PART with.pleasure cold coffee
'After all, who likes drinking cold coffee in the library café? (Nobody!)'

The relevant C-head and the particle can even be linearly separated by CP-boundaries (see Bayer et al. 2016). Given this situation, Bayer & Obenauer (2011) have proposed an analysis that leaves the particle in situ and that rests on agreement at a distance, so-called 'probe-goal agreement' (Chomsky 2000, 2001).

Take for instance the *wh*-question in (8) again. It is clear that interrogative force in this case is independent of the discourse particle *schon*. In other words, the particle contributes to interrogative force but does not constitute interrogative force. This situation can be accounted for by adopting a feature-sharing version of Agree (Pesetsky & Torrego 2007), allowing a mechanism where $Force^0$ does not have a Prt feature, but question-sensitive particles are likely to have a relevant (illocutionary) Q(uestion)$Force^0$ feature. Look at the following representation where an interpretable feature probes an uninterpretable matching feature; adopting a notational convention, in (9c) agreement is expressed by an arbitrary value that fills the empty slot in [ ]:

(9) a. [$_{\text{ForceP}}$ Wh Force^0 *i*QForce [ ] [$_{\text{TopP}}$ ... [**Prt** *u*QForce [ ] ...]]]

⇒

b. [$_{\text{ForceP}}$ Wh Force^0 *i*QForce [ ] [$_{\text{TopP}}$ ... [**Prt** *u*QForce [ ] ...]]]

AGREEMENT

⇒

c. [$_{\text{ForceP}}$ Wh Force^0 *i*QForce [**4**] [$_{\text{TopP}}$ ... [**Prt** ~~*u*~~QForce [**4**] …]]]

Via agreement, Prt becomes part of C^0 and its illocutionary components. Since agreement is constrained by locality, it is predicted that Force^0 and Prt must be clause mates. This conforms to the traditional observation that discourse particles are (generally) root phenomena. Note that the distribution of discourse particles in embedded clauses corroborates such an analysis. Coniglio (2011) has shown that discourse particles are restricted to embedded environments that can be classified as embedded root contexts (see Emonds 1970; Hooper & Thompson 1973; and Haegeman 2002 for a cartographic implementation). In other words, only those embedded clauses that contain a root-like CP-domain (including a ForceP, in cartographic terms) license the occurrence of discourse particles.

Given this syntactic requirement of particles that they must connect to the left periphery of the clause, it is not surprising that in many languages discourse particles even have their base position in the left periphery. In other words, in these languages there is no evidence that the particles have been merged in the IP/TP-zone. While left peripheral base generation (and thus surface occurrence) of particles have been suggested, for instance, for Chinese languages (Kuong 2008; Paul & Pan 2017) and for Japanese (Kuwabara 2013), it has also been proposed for Indo-European languages like Romanian (Coniglio & Zegrean 2012). Consider the Romanian question particle *oare*. In (10a), *oare* precedes a left-dislocated element, and in (10b) it occurs to the left of a left peripheral *wh*-element (examples from Coniglio & Zegrean 2012: 240):

(10) a. Oare și mașina și=a vândut=o Ion până la urmă?
PART also car-ART REFL=have.3SG sold=it Ion until at end
'Has Ion sold his car, too, in the end (I wonder?)'

b. Oare unde va pleca Ion mâine?
PART where FUT leave Ion tomorrow
'Where will Ion leave tomorrow? (I wonder)?'

In a similar vein, Hill (2002) has argued that particles like *oare* in Romanian are merged as an optional complementizer in the C-domain. Crucially, the CP position of particles like *oare* must be distinguished from particles that have been argued to be merged outside the CP. Higher sentential particles that occur in a projection higher than the CP-zone have been proposed for Japanese, for instance (Nasu 2012), but can clearly be distinguished from Japanese particles and speech-act morphemes that scope within the CP (see Sauerland & Yatsushiro 2017 on recent work) because they can appear in different sentence types and thus do not show the typical restrictions discourse particles display (i.e., *oare* above can only occur in interrogatives).

In the rest of the paper, we will argue that Basque realizes both positions in the sense introduced above, that is, both an IP/TP-internal and a CP-based position for discourse particles.

What is important in our context is that this may also have its reflexes in the grammar of other languages like German. In particular, the functional make-up of the clause provides two distinct positions for discourse particles and the elements they attach to cross-linguistically – one inside the IP/TP-domain and one position at the level of CP. Interestingly, sometimes the same discourse particle can occur in both positions, with different interpretations forthcoming in each case. With that said, let us now turn to the syntax of Basque discourse particles and their occurrence in questions in more detail.

3. Basque discourse particles in questions

3.1 Some basics on Basque syntax

Basque is known for being an isolated pre-Indo-European language in Europe. Nowadays, it is spoken by about 800.000 people and its territory is situated around the Gulf of Biscay in northern Spain and south-west France. Administrative or political borders within this area do not match dialectal boundaries, and the literature identifies five dialects (see Zuazo 2014): the western dialect, the central dialect, the Navarrese-Lapurdian, the Navarrese, and the Souletin dialect; in addition to these, there has been a sixth dialect, the Eastern Navarrese variety, which disappeared at the end of the 20th century. Since many of those dialects feature further sub-dialects, the Basque language is known to be of great value for researchers examining syntactic microvariation, as syntactic work on focus and negation (e.g., Etxepare 1998; Elordieta & Haddican 2016), datives, differential object marking, and argument incorporation (e.g., Etxepare & Fernandez 2013; Fernandez & Rezac 2013, 2016), or on different kinds of complementizers (Artiagoitia & Elordieta 2016) has demonstrated.

Basque is mostly classified as a SOV language (de Rijk 1969; Villasante 1980; Hualde & Ortiz de Urbina 2003). This word order has been identified as the unmarked or basic one, and we observe a high degree of word order flexibility at the clausal level, yielding SVO, OVS, OSV, VSO, or VOS, for instance:

(11) a. Andonik liburua ekarri du.
Andoni.ERG book.ABS bring AUX
'Andoni brought the book.'
b. Andonik ekarri du liburua.
Andoni.ERG bring AUX book.ABS
'It was Andoni who brought the book.'
c. Liburua, Andonik ekarri du.
book.ABS Andoni.ERG bring AUX
'The book, it was Andoni who brought it.'

As is the case in many other languages, these different word order choices correspond to different pragmatic interpretations at the level of information structure.

Basque is also a subject-object pro-drop language; that means that not only the subject of the clause, but also the direct object and indirect object can be elided:

(12) ~~Zuk~~ ~~niri~~ ~~hau~~ ematen didazu.
you.ERG I.DAT this.ABS give.IPFV AUX

'You usually give it to me.'

These drop strategies are possible since the arguments in such cases agree with the inflected verbal form. Therefore, finite verbs contain ergative, absolutive, and dative morphemes; also, they may agree with the addressee, provided that the context is appropriate. This is known as allocutivity (see Antonov 2015 for the cross-linguistic phenomenon). Since this phenomenon will play a role in our paper below (Section 3.2.2), let us briefly exemplify the features of allocutivity in Basque.

In the Basque language, when one is speaking to someone who would be addressed by means of the pronoun *hi* (familiar 'you'), the finite verb in Basque requires an additional morpheme corresponding to the overt addressee,[2] which is in fact not an argument selected by the verb:

(13) Hi, Alemanian egon nau-k/-n /* naiz
you, Germany.IN be AUX.1SG.ABS-ALLOC.M/-F AUX.1SG.ABS
'Dude, I was in Germany.'

Turning to verbal inflection more generally, we already observed in examples (12) and (13) that finite verbs are for the most part analytic, i.e., composed of a morphologically independent lexical verb carrying aspectual information and an auxiliary form bearing tense, mood, and agreement with the arguments and, in some cases, with the allocutive morpheme. Note that, additionally, there are about 12 verbs that can be synthetic but only in the progressive form, for instance:

(14) Zuk niri hau dakarkidazu
you.ERG I.DAT this bring.PROG. PRES.3SG.ABS.1SG.DAT.2SG.ERG
'You're bringing me this.'

These synthetic forms also bear tense, mood, and agreement with the arguments selected by the verb and, if necessary, with the addressee.

As described above, Basque is a subject-object pro-drop language. Consequently, in the case of synthetic verbs, these inflected forms can be the only constituents appearing in the clause. If so, this implies adding an expletive morpheme *ba* before the verb, since the verb cannot occur in clause-initial position alone:

(15) ~~Zuk~~ ~~niri~~ ~~hau~~ *(ba) dakarkidazu
you.ERG I.DAT this BA bring.PROG. PRES.3SG.ABS.1SG.DAT.2SG.ERG
'You're bringing me this.'

This phenomenon has been related to the well-known V2 constraint in other languages such as German (Ortiz de Urbina 1987; Laka 1990). Therefore, inflected verbal forms are banned from the first position. Note that this is not the case in (12), since in this case the inflected verb follows the lexical verb.

Note now that the lexical and auxiliary verbs do not have to be always adjacent. Consider for instance negative main clauses where the auxiliary is fronted:

(16) Ez naiz Lindaura joan ~~naiz~~
not AUX Lindau.ADL go AUX

[2] This morpheme also agrees with the gender of the addressee: *-k* or *-a-* for masculine and *-n* or *-na-* for feminine.

'I didn't go to Lindau.'

Leaving aside the exact position of negation in Basque, which has generated much debate in the literature (e.g., Laka 1990; Elordieta 2001; Haddican 2008), let us merely point out here that the auxiliary verb occurs attached to the negative particle *ez* and is non-adjacent to the preceding lexical verb.

Crucially now, another context where lexical verbs and auxiliaries are not adjacent is when the clause features a discourse particle. It is generally acknowledged that an inventory of evidential, epistemic, and interrogative particles is part of Basque grammar; see our detailed discussion in the following sections. As can be observed in (17) and (18), these particles (here: *omen* and *ote*) occur to the left of the inflected form:

(17) Irratia entzuten omen du
radio.ABS listen.IPFV PART AUX
'S/he is said to listen to the radio.'

(18) Egia esan ote du?
truth.ABS say PART AUX
'Did s/he say the truth (I'm wondering)?'

With this brief sketch of Basque syntax in place, let us now turn to Basque discourse particles and their occurrence in questions in more detail.

3.2 Basque discourse particles in questions

Basque grammars have traditionally classified a group of elements occurring adjacent to the inflected verb as 'modal' aka 'discourse' particles (e.g., de Rijk 1969; Euskaltzaindia 1987; Albizu 1991; Elordieta 1997). The particles grouped under this category are the following: *omen, ei, ahal, bide, ote,* and *al*. These particles are further subdivided into different semantic groups based on their general meaning contributions (e.g., evidential vs. non-evidential particles), but they could also be grouped together based on their respective sentence-type sensitivity, that is, according to the type of sentences they are mainly used in.

In what follows, we focus on the class of question particles and therefore deal with *ote* and *al*. In addition, we will also have a closer look at another element attached to the inflected form that has attracted less attention in the grammars so far: the particle *-a* used in eastern dialects. If mentioned at all, it has been labelled as an interrogative marker (Azkue 1923; Laffite 1944). To start with, let us look at some basic properties of both *wh*- and polar questions in Basque before we turn to the syntactic behavior of these particles in detail.

There is a lot of work on the syntax of Basque questions (see, for instance, the many contributions by Ortiz de Urbina 1989, 1993, 1999 to this topic). As already mentioned above, Basque is a SOV language, and it also features a V2 effect that can be observed in *wh*-questions. (19) illustrates that the *wh*-element thus moves to Spec-CP in Basque *wh*-questions, and the verbal complex is fronted to the C^0 position:

(19) [$_{CP}$ Zer [$_{C'}$ erosi du [$_{IP/TP}$ Nereak ~~zer~~ ~~erosi~~ ~~du~~?]]]
what buy AUX Nerea.ERG what buy AUX

'What did Nerea buy?'

As soon as an additional element occurs in front of the verbal complex located in C^0, the sentence becomes ungrammatical:

(20) * Nora Maitena joan da?
where.ADL Maitena go AUX
'Where did Maitena go?'

In the case of polar questions, we also observe fronting of the constituent composed of the lexical and the inflected verb:[3]

(21) [$_{CP}$ [$_{C'}$ Erosi du [$_{IP/TP}$ Mikelek janaria? ~~erosi~~ ~~du~~]]]
buy AUX Mikel.ERG food.ABS buy AUX
'Did Mikel buy the food?'

As we will demonstrate in the next two sections, both *wh*-questions (19) and polar questions (21) can contain discourse particles in Basque. Let us first turn to *wh*-questions and the relevant particle *ote* in this context.

3.2.1 Basque particles in *wh*-questions and emphatization

Consider the following *wh*-question again:

(22) [$_{CP}$ Zer [$_{C'}$ erosi du [$_{IP/TP}$ Nereak ~~zer~~ ~~erosi~~ ~~du~~?]]]
what buy AUX Nerea.ERG what buy AUX
'What did Nerea buy?'

Wh-questions like (22) can contain the particle *ote*. The particle *ote* can be used in *wh*-questions for different reasons: it can express that the speaker doubts the hearer's ability to answer the question, and it can also be used to form a rhetorical question (see Garmendia 2014). In addition, *ote* is also claimed to function to yield a mirative interpretation in the context of so-called surprise-disapproval questions (see Alcázar 2017 for corpus examples). In what follows, we will not be concerned with the semantic analysis of all these different readings and/or with proposing a common semantic denominator for those readings. Instead, we will look at the syntactic behavior of *ote*, which is, as far as we can tell, independent of its different readings. Since the exact meaning contribution of *ote* thus heavily depends on the pragmatic context, we will not provide specific paraphrases in our decontextualized examples. In (23), we see that when *ote* occurs in a *wh*-questions, the particle moves along with the inflected verb to CP to form the *wh*-question:

(23) [$_{CP}$ Zer [$_{C'}$ erosi ote du [$_{IP/TP}$ Nereak ~~zer~~ ~~erosi~~ ~~ote~~ ~~du~~?]]]
what buy PART AUX Nerea.ERG what buy PART AUX

[3] Although polar questions such as (21) have the verb in clause-initial position, let us briefly point out that also in polar questions one constituent can occur in front of the verbal complex in a focus context like the following:
(i) JANARIA erosi du Mikelek?
food.ABS buy AUX Mikel.ERG
'Is it the food what Mikel bought?'

'What did Nerea buy OTE?'

Note now that in Basque questions formed with *zergatik* ('why') and *nola* ('how'), the fronted *wh*-word can either be fronted alone and the verbal complex stays in situ (24) or the verbal complex moves to C^0 as in the *wh*-questions given above. In this case, the particle moves along with the verbal complex again (25):

(24) Zergatik Peiok hori galdegin ote dit?
why Peter.ERG that ask PART AUX
'Why did Peter ask me that OTE?'

(25) Zergatik galdegin ote dit Peiok hori ~~galdegin~~ ~~ote~~ ~~dit~~?
why ask PART AUX Peter.ERG that ~~ask~~ PART AUX

Based on these data, one can reasonably conclude that the particle *ote* in Basque *wh*-questions is attached to the inflected form of the verb, and if that part of the verbal complex moves, the particle must be fronted too. In fact, there is a lot of empirical evidence supporting such an analysis.

For instance, we also observe cases where I^0/T^0 is fronted and leaves the lexical verb V^0 in situ, as in negative main clauses (26) containing the negation word *ez* ('no/not'):

(26) Baina zure alaba, non ez ote da ~~non~~ oporretan egon ~~ez~~ ~~ote~~ ~~da~~?!
but your daughter where not PART AUX where holidays.IN be not PART AUX
'But your daughter, where hasn't she been to OTE?!'

Also, in embedded questions, not only the *wh*-word is fronted, but also the inflected verb, and the particle *ote* again occurs attached to the finite verb:

(27) Non utzi ote duen ~~non~~ egunkaria ~~utzi~~ ~~ote~~ ~~duen~~ jakin nahiko nuke.
where leave PART AUX.C where newspaper.ABS leave PART AUX.C know want.FUT AUX
'I would like to know where s/he may have left the newspaper OTE.'

Moreover, the occurrence of discourse particles depends on the presence of IP/TP. (28) shows that if the verb is not inflected, no particle can occur within such a clause:

(28) Ez dakit nora joan (*ote)
not know where.ADL go PART
'I don't know where to go.'

Finally, we find evidence that particles are elements attaching to I^0/T^0 based on the fact that particles do not prevent synthetic verbs from occurring in clause-initial position; this suggests that particles and inflected verbs form a single constituent (see Elordieta 1997):

(29) * (Ba) ote daki zer eskatu behar duen?
BA PART know what ask must AUX.C
'Does s/he know what s/he must ask for OTE?

Taken together, evidence like the one given above has resulted in the claim that discourse particles in Basque should be considered the head of a Mod(al) Phrase located between VP and IP/TP (30). This characterization is based on their clausal position in positive declaratives clauses (see Elordieta 1997; Elordieta 2001):

(30) $[_{IP/TP}\ [_{ModP}\ [_{VP}\ \ldots V]\ Prt]\ I/T]$

Other authors have located the ModP hosting the particle above IP/TP based on the scope of particles (Haddican 2008) or on morphological observations (Albizu 1991; Arregi & Nevins 2012):

(31) $[_{CP}\ [_{ModP}\ [_{IP/TP}\ [VP...V]\ I/T]\ Prt]]$

We cannot decide between these different theories here. What we would like to point out, however, is that according to common theories on discourse particles in Basque, particles depend on the structural representation of a IP/TP domain, and the phrasal projection hosting discourse particles is adjacent to the IP/TP domain – be it directly above or below within the hierarchy of functional projections. We have already mentioned above that there is an exception where the particle does not have to move along with the inflected verb: *why*- and *how*-interrogatives. We now turn to this interesting exception in more detail.

In Basque *why*- and *how*-questions, the particle may also occur adjacent to the *wh*-element in some dialects, mainly in Navarrese-Lapurdian (32). The option of fronting the verbal complex is also available in this configuration (33), which however does not change the situation that the particle attaches to the *wh*-element and not to the inflected auxiliary:

(32) Zergatik ote Peiok hori galdegin dit?
why PART Peter.ERG that ask AUX

(33) Zergatik ote galdegin dit Peiok hori ~~galdegin~~ ~~dit~~?
why PART ask AUX Peter.ERG that ~~ask~~ AUX

In fact, the particle *ote* may also occur attached to other *wh*-elements than to *why* or *how*:

(34) Non ote utzi dut ~~non~~ ~~ote~~ egunkaria ~~utzi~~ ~~dut~~?
where PART leave AUX where PART newspaper.ABS leave AUX
'Where did I left the newspaper OTE?'

This can be taken as evidence for the claim that, at some point of the derivation, the *wh*-element and the particle must be merged to form one constituent. Remember from our discussion above that Basque *wh*-questions obey a V2 constraint, meaning that there can only occur one constituent in front of the verbal complex sitting in the C^0 position. Accordingly, *wh*-word + particle must form one constituent in configurations such as (33).

Further evidence for co-constituency of *wh*-element + particle (and against co-constituency of inflected verb + particle) can be found in negated *wh*-questions (35) and embedded questions (36), since the particle in these cases is clearly not adjacent to the verb:

(35) Ez dakit non ote ~~non~~ ~~ote~~ egunkaria utzi dudan.
not know where PART where PART newspaper.ABS leave AUX.C
'I don't know where I may have left the newspaper OTE.'

(36) Baina zure alaba, non ote ez da ~~non ote~~ bakantzetan izan ~~ez~~ ~~da~~?
but your daughter where PART not AUX where PART holidays.IN be not AUX
'But your daughter, where hasn't she been to OTE?!'

Crucially now, the co-constituency of *wh*-elements and discourse particles is a syntactic option that can also be found in other languages featuring discourse particles in *wh*-questions. Let us turn to German again in this context.

In Section 2.1 above, we pointed out that positional rigidity is a highly reliable property of discourse particles in German, and that this property distinguishes them from other modifiers that express closely related meanings like higher adverbs. Discourse particles in German *wh*-questions seem to present an exception. Consider (37a) and the alternative word order choice in (37b):

(37) a. Wie habe ich nur den Schlüssel verlieren können? (Abraham 1991: 237)
how have I PART the key lose could
b. Wie nur habe ich den Schlüssel verlieren können?
how PART have I the key lose could
'How on earth could I lose the key?'

As in our Basque examples above, *wh*-element + particle must form a constituent in (37b) because German is a V2 language which usually disallows more than a single constituent to the left of the finite verb (i.e., in Spec-CP) of the matrix clause. Bayer & Trotzke (2015) present evidence based on several classical constituency tests that the *wh*-element and the particle in these constructions should be analyzed as one constituent. In Bayer & Obenauer (2011), this constituent has already been identified as a so-called S(mall)P(a)rtP(hrase).

Coming back to Basque cases such as (38), the main idea would be that *non* + *ote* form one constituent that is derived in a separate derivation layer. There is an elementary computational reason that motivates such an approach. If the *wh*-element *non* would undergo merger with *ote* after the particle has been merged in ModP, this operation would violate the 'Extension Condition' According to the cyclic organization of grammar in minimalism, "Merge always applies at the simplest possible form: at the root" (Chomsky 1995: 248). We can thus see that at the derivational stage given in (39), the *wh*-phrase can only be merged with the root and not with *ote* alone:

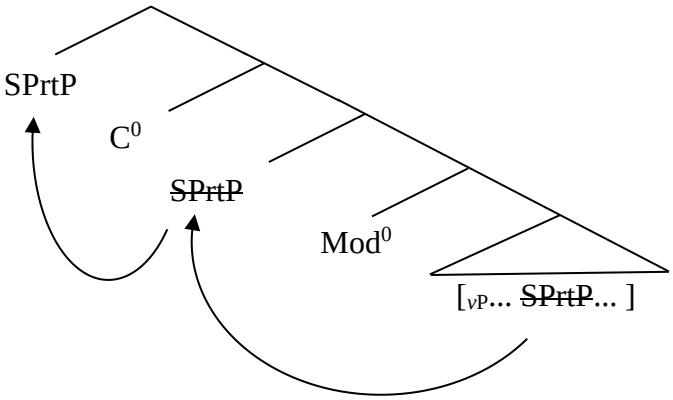
(38) Non ote utzi dut ~~non~~ ~~ote~~ egunkaria ~~utzi~~ ~~dut~~?
where PART leave AUX where PART newspaper.ABS leave AUX
'Where did I leave the newspaper OTE?'

(39) *non* [$_{\text{ModP}}$ *ote* [$_{\text{VP}}$ … ~~non~~…V]]

Accordingly, we propose that after deriving the constituent [*non* + *ote*] (SPrtP) in a separate derivational workspace, SPrtP is then merged into the unfolding V-projection, the step after which successive-cyclic movement of SPrtP, analogous to *wh*-movement, may apply. Both *ote* and the *wh*-element are operators that must be licensed in a scope position. Accordingly, in addition to

serving as an argument, SPrtP must raise to the specifier of ModP where *ote* can take scope over the proposition. Since *ote* is only one of the scope-taking operators involved, SPrtP must raise to a position where the *wh*-element can be licensed. This derivational sequence is summarized in (40) and exemplified in (41):

(40)



(41) [$_{CP}$ [Non ote] [$_{C'}$ utzi dut [… [$_{ModP}$ [~~non~~ ~~ote~~] [$_{vP}$ [~~non~~ ~~ote~~] egunkaria ~~utzi~~ ~~dut~~?]]]]]
'Where did I leave the newspaper OTE?'

Note again that deriving the constituent [*non ote*] in a separate derivation is not special or exotic in any way but rather in accordance with standard approaches in minimalism that assume interaction of subderivations (e.g., Trotzke & Zwart 2014), essentially in the form of generalized transformations. Crucially, the Extension Condition on structure building mentioned above determines that the derivation of complex subjects and adjuncts implies that the computational system has to deal with more than one root syntactic object at the same time (Hornstein & Nunes 2014; Nunes 2012).

Van Craenenbroeck (2005) offers an account of very similar constructions which he discusses, however, only with respect to sluicing and other fragments. According to his account, the *wh*-element and the rest do not form a constituent. The two parts are rather distributed over different CP shells. However, in our cases, we have to make sure that the *wh*-element and the particle form a constituent that moves as a unit because only then we make the right predictions concerning V2 effects in both Basque and German.

Let us now turn to an aspect that distinguishes cases where *ote* is attached to a *wh*-element from examples where it attaches to the verbal complex and moves together with verbal elements (42) rather than with a *wh*-element (43):

(42) [$_{CP}$ Zer [$_{C'}$ erosi ote du [$_{IP/TP}$ Nereak ~~zer~~ ~~erosi~~ ~~ote~~ ~~du~~?]]]
what buy PART AUX Nerea.ERG what buy PART AUX
'What did Nerea buy OTE?'

(43) [$_{CP}$ Non ote [$_{C'}$ utzi dut [$_{IP/TP}$ ~~non~~ ~~ote~~ egunkaria ~~utzi~~ ~~dut~~?]]]
where PART leave AUX where PART newspaper.ABS leave AUX
'Where did I leave the newspaper OTE?'

As soon as [*wh+ote*] is merged into the derivation, an extra pragmatic effect is added to the whole utterance, which is absent when *ote* attaches to the verbal complex. Accordingly, in addition to purely configurational reasons for assuming a separate derivation layer involved in generating [*wh+ote*], we also notice some motivation coming from interpretive features that suggest a separate derivation serving to form an interpretational unit [*wh+ote*].

This extra pragmatic effect can be accounted for in terms of emphatization, that is, [*wh+ote*] is associated with an extra touch of the speaker's emphasis, and we build on the notion of 'emphasis for intensity' as proposed by Trotzke & Turco (2015) and Trotzke (2017) for German configurations of the type given in (37b). We thus claim that the derivation given in (40) and (41) must be further refined by adding an extra step involving movement of the SPrtP to the specifier of EmpP before the *wh*-element must move further for reasons of clausal typing. Note that EmpP constitutes a syntactic layer that cannot be identified with the function of clausal typing. More specifically, Trotzke (2017) has argued that emphasis in questions is a type of not-at-issue meaning whose operator must be below the Question operator for many empirical reasons:

(44) [SPrtP [C^0 [~~SprtP~~ [Emp^0 …[$_{ModP}$ ~~SPrtP~~ [Prt^0 … [$_{VP/vP}$... ~~SPrtP~~...]]]]]]]

After having illustrated and accounted for the different uses of *ote* in Basque *wh*-questions, let us now turn to Basque particles in polar questions. In this context, as we will argue, Basque particles can function as clause-typing devices and are thus in fact used in the unmarked cases of performing a question in this language. More specifically, while the particle *ote* instantiates a functional head that contributes not-at-issue/evaluative meaning at the level of modality and can thus be represented by the head Mod^0 and as a consequence also function in other not-at-issue domains such as emphasis (Emp^0), particles like *al* occupy a head related to sentence mood and thus represent the relevant speech act (see Haddican 2001).

3.2.2 Basque particles in polar questions and two distinct particle positions

In this section, we will finally look at discourse particles in polar questions. In Basque dialects, the particle *al* (central dialect) and *-a* (eastern dialects) can occur in such questions – and if they do, the particles have to move together with the verbal complex, as we also observed in the context of the non-emphatic variants of *wh*-questions with *ote* in Section 3.2.1 above:

(45) Erosi al du Mikelek janaria? ~~erosi~~ ~~al~~ ~~du~~ (central dialect)
buy PART AUX Mikel.ERG food.ABS buy PART AUX
'Did Mikel buy food?'

(46) Erosi dua Mikelek janaria? ~~erosi~~ ~~dua~~ (eastern dialects)
buy AUX. PART Mikel.ERG food. ABS buy AUX. PART

Let us first turn to the particle *al* in more detail. In what follows, we would like to argue that *al* is similar to *ote* in that it also originates in the IP/TP domain (see our discussion above). First, consider the fact that *al* can occur in embedded questions, and, in this context, it is compatible with the complementizer -(*e*)*n*. The hierarchical relation between these particles and the

complementizer -(*e*)*n* is that complementizers must c-command particles:

(47) Xabierri afaria egin al duen galdetu diot.
Xabier.DAT dinner.ABS do PART AUX.C ask AUX
'I asked Xabier whether he prepared the dinner.'

Second, the particle *al* can be used in contexts where an allocutive morpheme is present in the inflected form. Remember from our discussion in Section 3.1 that these morphemes are claimed to occupy the CP-domain (Oyharçabal 1993; Miyagawa 2012):

(48) Egingo al di-k/-n afaria?
do.FUT PART AUX-ALLOC.M/-F dinner.ABS
'Is s/he going to prepare the dinner? (talking to, for instance, a close friend)'

The same holds for *ote*, lending further support to the idea that *ote* is not located in CP, but rather takes scope in a ModP projection inside the IP/TP:

(49) Egingo ote di-k/-n afaria?
do.FUT PART AUX-ALLOC.M/-F dinner.ABS
'I'm wondering if s/he's going to prepare the dinner. (talking to, for instance, a close friend)'

While we can thus conclude that both *al* and *ote* are particles that originate in the IP/TP domain and are thus not left peripheral ('C') particles as they can be found in other languages such as Romanian or Asian languages (see Section 2.2 above), there are also crucial differences between these particles.

First, note that *al* is really confined to the speech act of a polar question. That is, it cannot occur in *wh*-questions:

(50) Noiz etorriko (*al) da afarira?
when come.FUT PART AUX dinner.ADL
'When is s/he coming to the dinner?'

On the other hand, particles like *ote* can also be interpreted and thus be used in polar questions:

(51) Etorriko ote da afarira? ~~etorriko~~ ~~ote~~ ~~da~~
come. FUT PART AUX dinner.ADL come.FUT PART AUX
'Is s/he's coming to the dinner OTE? '

Given this distribution, we can say that modality particles like *ote* can modify different types of speech acts, while *al* depends on the exact clausal configuration of a polar question. This indicates that they might be represented by another functional head than Mod, as has already been proposed by Haddican (2001) and others. That is, particles like *al* instantiate a Mood head that by definition restricts the class of speech acts the particles can occur in (e.g., Nikolaeva 2016; Lohnstein 2007).

This also explains another fundamental difference between *ote* and *al*: In contrast to *ote*, *al* does not modify the speech act (in this case: a polar question). In fact, Basque polar questions containing *al* are the unmarked cases, and leaving out *al* results in biased versions of the polar

question, for instance:

(52) Dena gainditu zenuen?
all.ABS pass AUX
'So, you passed all (your exams)?

Accordingly, we claim that *al* instantiates a Mood head that is, according to our discussion above, part of the functional hierarchy inside the IP/TP domain. There is another syntactic fact, however, that has to be taken into account at this point. Note that *al* and *ote* are in complementary distribution, meaning that they cannot occur together in one single clause:

(53) * Egin {al ote} / {ote al} du afaria ~~egin~~ ~~du~~?
do PART PART PART PART AUX dinner.ABS do AUX
'Did s/he prepare the dinner?'

Taken together, we can thus conclude that IP/TP-internal question particles in Basque have a fixed position inside the functional hierarchy of the clause that comes with (at least) two different interpretations. In (54), we call this fixed position a PrtP, which is in accordance with what we argued for in Section 2 regarding the differences between particles and related categories such as adverbs. In other words, we claim that particles project their own functional projection that features modality and mood interpretations and thus do not occupy the adverb-related positions inside the IP/TP that have been proposed by Cinque (1999) and others:

(54) $[_{IP/TP}\ [_{PrtP}\ [_{VP}\ \ldots V]\ Prt^{0}_{[mood]/[modality]}\ ]\ I/T]$

There is an interesting cross-linguistic implication of our observation and analysis in the domain of IP/TP-internal Basque particles. Note that it is generally claimed for German (a language with IP/TP-internal particles) that discourse particles in questions can co-occur and be stacked (Thurmair 1989; Bayer & Trotzke 2015):

(55) Wer trinkt denn schon gerne kalten Kaffee?
who drinks PART PART with.pleasure cold coffee
'After all, who likes drinking cold coffee? (Nobody!)'

It has been pointed out that there are ordering restrictions (**schon denn*) of stacked particles and that this indicates separate particle heads with different scope-taking properties. However, it has not been observed so far that German, like Basque, also displays complementary distribution of questions particles. For instance, the particles *nur*, which is domain widening (Dörre & Trotzke in press), and *schon*, which induces a scale of plausibility or likelihood (Bayer & Obenauer 2011), cannot co-occur in a *wh*-question:

(56) Wer trinkt (*nur) schon (*nur) gerne kalten Kaffee?
who drinks PART PART PART with.pleasure cold coffee
'After all, who likes drinking cold coffee? (Nobody!)'

This suggests that we also might find discourse particles in German that compete for the same structural position in the clause. Accordingly, Prt heads with a complex feature composition resulting in complementary distribution might also exist in languages like German.

At the end of this section, let us now turn to the version of *al* that is used in eastern dialects, namely *-a*. Interestingly, in this case we cannot account for the syntactic behavior of the particle by proposing the representation in (54). Instead, as we would like to argue, this particle instantiates a functional position outside the IP/TP-zone and thus represents a structural option that we also observe in other languages like Romanian and Asian languages (see Section 2.2).

There is already some work by Ortiz de Urbina (1992) and Laka (1991) claiming that the particle *-a* might occupy the head position in the CP-domain. However, both authors do not explore its syntactic behavior in more detail, and their assumption is based on its surface syntactic position and relevant analyses for question particles in other languages. In what follows, we provide some syntactic evidence that lends further support to their hypothesis (see Monforte in press for a first approach) and we then conclude by referring back to the other Basque questions particles we discussed above.

Note first that the morphosyntactic position of *-a* differs from the position of the other discourse particles discussed above since *-a* functions as a suffix and not as a prefix:

(57) Egin du-a [> dia] afaria ~~egin~~ ~~du~~?
do AUX-PART dinner.ABS do AUX
'Did s/he prepare the dinner?'

This position resembles the one complementizers occupy because complementizers are also always attached to the right of the inflected verb:

(58) Xabierri afaria egin du-en galdetu diot.
Xabier.DAT dinner.ABS do AUX-C ask AUX
'I asked Xabier whether he prepared the dinner.'

A related observation is that *-a* cannot occur in embedded questions that feature, e.g., the complementizer *–en*, even in embedded root contexts where *ote* and *al* can appear:

(59) Xabierri afaria egin du (*-a) -en(*-a) galdetu diot.
Xabier.DAT dinner.ABS do AUX -PART-C -PART ask AUX
'I asked Xabier whether he prepared the dinner.'

The evidence above suggests that complementizers and *-a* are in complementary distribution and that *-a* therefore occupies the C-position in the left periphery. A last empirical point we would like to mention in this context is that the particle *-a*, in contrast to IP/TP-internal particles like *al* and *ote* (see above), cannot occur in allocutive contexts, even if the discourse requirements force the presence of the allocutive morpheme, which is generally claimed to occupy the C-position:

(60) Jinen da(*-n)-a hire laguna afarira ~~j~~inen ~~da~~?
come.FUT AUX -ALLOC.F.PART your friend.ABS dinner.ADL come.FUT AUX

'Dude, is your friend coming to the dinner?'

(61) Jinen du-n(*-a) hire laguna afarira ~~jinen~~ ~~da~~?
come.FUT AUX -ALLOC.F .PART your friend.ABS dinner.ADL come.FUT AUX
'Dude, is your friend coming to the dinner?'

All in all, the particle *-a* is thus a case of left peripheral discourse particles as they can be found in other languages (see Section 2.2 above). If we take our structural claim for *ote* and *al* presented above, we can now complete the picture by adding a potential base position for question particles in the left periphery of the Basque clause, which can be instantiated by *-a* in eastern dialects:

(62) $[_{CP}\ Prt^{0}\ldots\ [_{IP/TP}\ [_{PrtP}\ [_{VP}\ \ldots V]\ Prt^{0}_{[mood]/[modality]}\ ]\ I/T]$

Crucially, the claim given in (62) makes the correct prediction that *-a* can co-occur with other discourse particles such as *ote*, which do not compete with *-a* for the C-position (63). In this regard, the eastern variant *-a* differs from the IP/TP-internal particle *al*, which is in complementary distribution with *ote*, as we have demonstrated above.

(63) Egin ote du -a afaria ~~egin~~ ~~ote~~ ~~du~~?
do PART AUX -PART dinner.ABS do PART AUX
'Did s/he prepare the dinner OTE?'

4. Conclusion

In this paper, we focused on the syntax of question particles in Basque. We presented an account that draws new parallels between the syntactic behavior of discourse particles in Basque and some recent findings that have been reported for other languages, particularly for German. We first argued for the relevance of a syntactic perspective on discourse particles, given that the topic of discourse particles has recently received a lot of attention in the semantics/pragmatics literature and not so much in formal syntax. In this context, we pointed out that discourse particles must be considered distinct syntactic elements and cannot be grouped together with their close relatives, for instance with higher adverbs.

After having introduced the syntactic perspective on discourse particles, we then turned to the Basque language and its inventory of particles in both *wh*-questions and polar questions. For *wh*-questions, we provided evidence for the claim that the particle *ote* occupies a IP-/TP-internal particle position and, if attaching to a *wh*-element, can serve to form emphatic questions of the type that have also been proposed for German. Given not every language features an inventory of discourse particles (English, for instance, lacks them altogether) and German and the isolate Basque language are unrelated, it is all the more surprising that we find exactly the type of co-constituency of particle and *wh*-element and the corresponding movement operations yielding emphatic questions in both languages. In the context of polar questions, we further developed the idea that there are two distinct positions for discourse particles in central and eastern dialects of Basque: one inside the IP/TP-domain and one in the left periphery of the clause. We pointed out that this analysis explains the restrictions on particle distributions we observe in polar questions

and that the left peripheral position of particles is again a phenomenon that we know from other cross-linguistic cases.

All in all, our cross-linguistic syntax of particle elements has adopted the working hypothesis that discourse particles have shifted from heterogeneous sources to the repertory of functional heads, and as such contribute in fundamental ways to the functional architecture of the clause. Assuming that discourse particles are neither adverbs nor adjoined but rather functional heads, we tried to exclude the theoretically unsound option of positing a particle-specific head for each discourse particle. Rather, from a broader cognitive perspective, it is more attractive to find out what exactly is the set of particle-specific projections in each language and how to account for this set in terms of (preferably) few functional projections cross-linguistically. Adopting this perspective, we can see discourse particles as they are found in many languages as a window through which we can view and determine how close the connection between illocutionary-meaning components and syntactic mechanisms really is. Our paper thus demonstrates that a cross-linguistic syntax of discourse particles is worth pursuing, despite the substantial progress that has been made in semantic/pragmatic approaches in this domain.

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