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## Clause type vs. speech act: Knowledge confirmation questions in Basque<sup>1</sup>

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This article analyzes Knowledge Confirmation Questions (KCQ) in Basque, an instance of non-canonical questions that has not been analyzed yet. KCQs display three characteristic elements, namely, (i) a declarative-type syntax, (ii) an interrogative-like intonation, and (iii) the discourse particle BA; and are interpreted as follows: "Do you know that P?". Here, I propose that the meaning contribution of KCQs derives from the interaction of these three elements. More precisely, I argue that their question-like intonation, which adds interrogative interpretation, takes scope over BA, which regulates the addressee's Doxastic State and undergoes context shift. Basque KCQs constitute an interesting case study, because they raise some interesting questions on the syntactization of discourse particles, as they seem to contradict the assumption that discourse particles do not fall under the scope of sentential operators.

KEYWORDS: clause type, discourse particles, speech act

## 1. INTRODUCTION

This article explores the interaction between intonation and syntax in expressing clause type and speech act, as well as the role that discourse particles play in this relationship. For this purpose, I will focus on a Basque structure, which has thus far not been researched sufficiently, presented in Example (1).

(1)	Jon	etorri	da	ba?	
	Jon	come	AUX	PRT	
	'[Do y	ou know th	is?:] Jon I	has come.	,

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The pragmatic interpretation of the sentence in Example (1) is not that of a canonical declarative or interrogative sentence. Rather, the speaker asks the addressee about whether (s)he knows the sentence content; it is thus an instance of a noncanonical question. I will denominate this structure 'Knowledge Confirmation Question' (KCQ).<sup>2</sup>

Three aspects interact in a KCQ: (i) a declarative clause-type, (ii) interrogative intonation and speech act and (iii) the discourse particle BA. Thus, KCQs are especially interesting for the study of the pragmatic aspect of the clause, more precisely, the interaction between clause type and speech act, and how discourse particles modify the speech act of the sentence. In this work, I will present a formative approach to Basque KCQs, focusing first on each defining aspect individually, and then on the interaction between all of them.

This article is structured as follows. In Section 2, I will talk about the correlation between clause types and speech acts. In Section 3, I will analyse the discourse particle BA within the Basque discourse particle system and its meaning in different clause types. Section 4 will bring together all the components addressed in previous sections in order to propose an analysis of KCQ sentences from a syntax–prosody interface. In Section 5, I will present the conclusions.

## 2. Clause types and speech acts

## 2.1. Disentangling clause types and speech acts

Clause types are specific forms of sentences that are associated with some canonical discursive function. Linguistic theory assumes that every clause must be typed (Cheng 1997: 29), that is, identified as declarative, interrogative or imperative, which are considered to be universal (Sadock & Zwicky 1985, Portner 2004), or other clause types that may be present in a language.<sup>3</sup> Example (2) shows examples of different clause types in English, declarative, interrogative and imperative, respectively.

- (2) (a) He will eat the beans. (Sadock & Zwicky 1985: 159)
  - (b) Will he eat beans? (ib.)
  - (c) Eat the beans! (ib.)

In English, declarative sentences are recognisable by SVO word order with overt subject in Example (2a), interrogative sentences undergo subject-auxiliary inversion (or receive Do-support if there is no auxiliary) in Example (2b) and imperative

<sup>[2]</sup> The data described in this paper correspond to western and central varieties of Basque, where KCQs are common. BA is less used in eastern varieties, and different speakers of eastern varieties do not recognise KCQs as part of their speech. In any case, the dialectal variation of BA has thus far not been researched sufficiently and deserves further research.

<sup>[3]</sup> Clause types beyond declarative, interrogative and imperative clauses are present in different languages. In German, Altmann (1984) and Thurmair (1989) distinguish seven clause types, adding optatives, exclamatives and wn-exclamatives to the previous ones. Pak (2008) proposes that in Korean, there are five clause types, namely, declaratives, interrogatives, imperatives, exhortatives and promissives, contrary to some previous accounts that proposed even 10.

sentences lack an overt subject in Example (2c). Other languages use other mechanisms beyond word order and presence of subject for clause typing. Declaratives are usually the most unmarked clause type, deeming the regular word order in embedded clauses unmarked, but in some languages, they may be marked too, for example, by particles, such as Gascon QUE (Morin 2008), or Y(R)/R (affirmative) and NI(D) (negative) in Welsh (Sadock & Zwicky 1985: 166). Yes-no questions are marked in most languages by final rising intonation, although most languages also use some other morphological or syntactic means: question particles, verb morphology, word order, etc. (Dryer 2013). Some widespread grammatical mechanisms to mark imperatives are verbal morphology, sentence final particles or imperative verbal mood.

Clause types are usually linked to some canonical pragmatic impact in discourse. Declaratives convey 'assertions, expressions of belief, reports' etc. (Sadock & Zwicky 1985: 165). Interrogative sentences regularly 'try to make the addressee [...] provide a particular piece of information' (Krifka 2011: 1742). Finally, imperatives are usually associated with orders (Kaufmann 2021).

Things are more complicated than a first approach may suggest, however. Aside from clause type, which is the syntactic part of the sentence, we should also take into account the speech act conveyed by a sentence, that is, its pragmatic dimension. Austin (1962) broached the observation that not all sentences convey a statement that can be true or false; instead, when a speaker says something, (s)he performs an act, that is, a SPEECH ACT. Besides the locutionary act, that is, what is explicitly said, the speech act has two other main dimensions, namely, the illocutionary act (i.e. what the speaker intends with the speech act) and the perlocutionary act (i.e. the effect of the speech act in the hearer) (Austin 1962: 98–101). In what follows, I will focus on the illocutionary dimension of speech acts.

On this matter, two issues must be taken into account. First, a clause type does not express a single speech act but a certain range of them. For instance, interrogative sentences may express, for example, requests in Example (3a) and invitations in Example (3b) but also imperatives may convey requests in Example (3c) and invitations in Example (3d).

- (3) (a) Could you open the window? (Krifka 2011: 1743)
  - (b) Do you want some fruit? (Bolinger 1978: 88, adapted)
  - (c) Please help me with this. (Kaufmann 2021: 8)
  - (d) Have a seat! (Kaufmann 2021: 9)

Examples like Example (3) lead us to think that there is no correspondence between clause type and speech act. Searle (1976) explores the relation between syntax and speech act, and shows that clause type does not directly mark the speech act of a sentence. In fact, an interrogative clause, for instance, may not convey a speech act of assertion.<sup>4</sup> Thus, clause type conditions the speech act, but it is not a

<sup>[4]</sup> As an anonymous reviewer points out, rhetorical questions are assumed to assert their sentence content, although not in the same way as declaratives.

means to explicitly express the exact speech act that the speaker wants. In this regard, Allan (2006) proposes that each clause type has a primary illocution (PI) that conditions the possible illocutions of an utterance but without completely determining it.<sup>5</sup>

A second issue is that of sentences that seem to combine two clause types at once. The classical example are 'declarative questions' in Germanic languages (Gunlogson 2003, 2008), a type of noncanonical questions.<sup>6</sup>

## (4) You ate lunch already? (Gunlogson 2008: 101)

Declarative questions may at first sight seem to challenge the claim that 'the types are mutually exclusive, no sentence being simultaneously of two different types' (Sadock & Zwicky 1985: 158), since sentences such as Example (4) appear to be declaratives but, at the same time, have the questioning properties of yes–no questions. If we look closer, however, it seems more reasonable to approach declarative questions as declaratives expressing an information-seeking speech act.

Comparing declarative questions, regular declaratives and regular interrogatives help us discern the pragmatic contributions of the clause type and the speech act, as well as the linguistic means to express each of them. Regarding the pragmatic aspect, declarative questions seem to combine the speaker's commitment and inquisitivity.<sup>7</sup> Here, I understand commitment as 'propositions [...] publicly taken by the participants in a conversation as being true' (Farkas & Bruce 2010: 84), and inquisitivity as offering the addressee different alternatives to commit. Unlike interrogative sentences, regular declaratives are usually linked to assertions (Stalnaker 1978, Farkas & Bruce 2010), which suggests that the declarative clause type contributes to the speaker's commitment. On the other hand, both interrogative sentences and declarative questions have an inquisitive component, suggesting that it is derived from the questioning speech act rather than from the clause type, since they both share the inquisitive component, but they have different clause types. Thus, in general terms, it seems that the declarative clause type marks the speaker's commitment, whereas the rising intonation present in both declarative questions and interrogative sentences conveys inquisitivity. Work on intonation shows that there is not one-to-one correspondence between speech act and intonation pattern (Thorson et al. 2015),

<sup>[5]</sup> For a literature review on the relation clause type–speech act, I recommend chapter 2.3 of Wiltschko (2021).

<sup>[6]</sup> Exclamative questions (Munaro & Obenauer 1999) or surprise questions (Celle 2018, Celle et al. 2019) are other instances of noncanonical questions.

<sup>[7]</sup> Making an exhaustive study of felicitous and infelicitous pragmatic contexts of declarative questions, Gunlogson (2008) proposes that declarative questions are felicitous in contexts where the speaker commits to the proposition due to independent evidence from the addressee, and both the speaker and the addressee are aware that the addressee has a more direct and reliable evidence to decide on the truth of the proposition.

but it is clear that intonation plays a role in discerning between different speech acts, for example, between information-seeking and confirmation-seeking questions (Vanrell et al. 2012).<sup>8</sup> Thus, declarative questions would be the result of the combination of both components, as Gunlogson (2003, 2008) suggests.

## 2.2. The syntax of the discursive dimension of sentences

Let us now turn to the syntactic account for this dissociation between clause type and speech act. Traditionally, clauses were assumed to be typed in the left periphery of the clause, that is, in the complementizer phrase (CP). Rizzi (1997) proposed a more explicit account for the left periphery, where the CP was split into four phrases: ForceP, TopicP, FocusP and FinitenessP. However, in Rizzi's account, there was no distinction between clause type and speech act, and both clause type and speech act were encoded in ForceP. Such analysis leaves no room for the data we have discussed in the previous section.

Coniglio & Zegrean (2012), in analysing evidence of German, Italian and Romanian discourse particles, propose splitting ForceP into two projections: a higher phrase that marks the speech act of the clause and a lower phrase where the clause type is encoded as in Example (5a).<sup>9</sup> Such an analysis succeeds in accounting for the dissociation between clause type and speech act. Thus, a declarative question like Example (4) could be analysed as Example (5b), where intonation (marked by  $\uparrow$  in Example (5b)) would encode the speech act of the sentence.

(5) (a) [SAP [CTP [TopP [FocP [FinP [TP ... ]]]]](b) SAP SA CTP  $\uparrow_{Inq}$  CT TP $\downarrow_{decl}$  You ate lunch already

<sup>[8]</sup> Works on the pragmatic dimension of intonation (Vanrell et al. 2012, Portes et al. 2014) show that intonation may express a wide range of pragmatic meaning, such as speech participants' epistemic certainty, attitude attribution and call on addressee. Thus, speech acts like information seeking could be a side effect of the other information encoded in intonation.

<sup>[9]</sup> Coniglio & Zegrean (2012) use the following labels: Clause Type (CT) and Illocutionary Force (ILL). For the sake of clarity, here, I will use Speech Act (SA) instead of ILL, in line with a broad research tradition (Speas & Tenny 2003, Haegeman 2014, Corr 2016: a.o.).

The role of intonation in a speech act and its relation to clause type has been extensively discussed in literature. Truckenbrodt (2011), who has worked on the meaning dimension of intonation, concluded that intonational morphemes are linked to different speech acts, for example, English H\* contour conveys assertion, whereas H- is used for questioning. Similarly, Heim & Wiltschko (2020a, b) have also argued that intonation plays a role in commitment and engagement management in conversation. They go a step further in proposing that speech acts do not form a natural class but instead arise from the combination of clause type and different values of commitment and engagement conveyed by intonation.

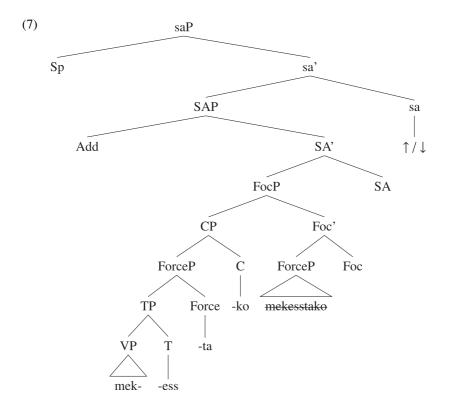
A different data set leads An (this volume) to draw a similar conclusion to Coniglio & Zegrean (2012) and Heim & Wiltschko (2020a, b), regarding both the distinction between clause type and speech act and the role of intonation in speech act marking. He analyses Korean stranded embedded clauses (SECs), finite verbs with clause typing particles and embedding complementisers that are used in main clause contexts. Crucially, the clause typing suffix of the verb does not mark the speech act of the sentence, which is independently marked by intonation.<sup>10,11</sup>

- (6) (a) Mek-ess-ta-ko? ↑
   eat-PST-DECL-C
   '(Did you say) that (you) ate?'
  - (b) Mek-ess-ta-ko. ↓
     eat-PST-DECL-C
     '(I said) that (I) ate.'

An (this volume) proposes that the inquiring illocutionary force of the sentence is encoded in the speech act domain, following theories of syntactic speech act domain above ForceP (a.o. Speas & Tenny 2003, Hill 2007a, b). Although from a different perspective, this proposal does not differ from Coniglio & Zegrean (2012), in the sense that both structures distinguish clause type and speech act. Compare Example (5b) to Example (7).

<sup>[10]</sup> In Example (6),  $\uparrow$  represents high intonation, whereas  $\downarrow$  stands for low intonation, in general terms.

<sup>[11]</sup> Davis (2009, 2011), McCready & Davis (2020) observe that, for example, Japanese final particle vo has different functions depending on the intonation contour of the sentence. According to Davis (2011), vo updates addressee's public commitment, falling intonation requires the addressee to remove some preexisting commitment to fit the sentence containing vo, whereas rising intonation gives rise to a 'relevance implication'. Therefore, they also propose a separation between the particle content and the meaning conveyed by intonation, in line with An (this volume).



In light of these works, it seems reasonable to consider a separation between clause type and speech act also in the syntactic domain.

As this article deals with a noncanonical question in Basque, in the next subsection, I will look at clause type and speech act marking in Basque.

## 2.3. Clause types and speech acts in Basque

Contrary to English, Basque has a highly free word order, and the surface word order is not necessarily determinant in clause type marking. It is commonly agreed that declarative sentences have a neutral SOV order (Ortiz de Urbina 2003: 448), as in Example (8a), but information structure (i.e. topicalisation, focalisation, etc.) plays a role in surface word order: foci must appear immediately to the left of the verbal complex (verb + auxiliary) and topics appear before foci (a.o. Elordieta 2001), as in Example (8b).

- (8) (a) Ene ekarri aitak gorria dio. amari gona skirt brought my father.erg mother.dat red AUX 'My father has brought a red skirt to my mother.' (Ortiz de Urbina 2003: 448)
  - (b) Amari ENE AITAK ekarri dio gona gorria. mother.dat.top my father.erg.foc brought Aux red skirt 'To my mother, MY FATHER<sub>foc</sub> has brought her a red skirt.'

Regarding interrogatives, 'yes/no questions need not be signalled by any mark other than interrogative intonation' (Etxepare & Ortiz de Urbina 2003: 467). Some researchers claim that verb fronting may also be used as a means of typing an interrogative clause (Etxepare & Ortiz de Urbina 2003: 468). Verbinitial is the neutral word order in interrogative clauses according to Ortiz de Urbina (1999), who adapts the split–CP hypothesis by Rizzi (1997) to Basque, and proposes that the highest CP phrases, including ForceP, are head initial. In interrogative sentences the finite verb would move to Force<sup>0</sup>, causing a verbinitial surface order. However, the finite verb may appear in initial position in declaratives too, which suggests that word order is not a clause type marking tool but simply a means of information structure regulation in every clause type.

 (9) Joan dira enarak, hasi da negua. gone AUX sparrows, begun AUX winter
 'The sparrows have left, winter has begun.' (Etxepare & Ortiz de Urbina 2003: 472)

Interrogative sentences must have a special intonation. In central Basque, 'the pitch rises at the first stressed syllable and continues high up to the last syllable of the sentence, where it falls' (Elordieta & Hualde 2014: 456), as can be seen in Figure 1. In contrast, 'pitch–accents in neutral declaratives are generally rising from a valley at the beginning of the stressed syllable' (Elordieta & Hualde 2014: 444), as Figure 2 shows.

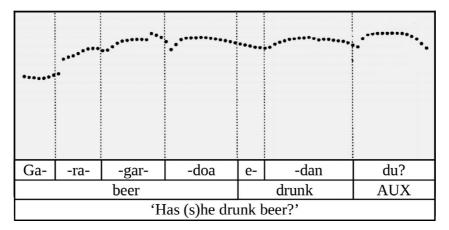
As with the surface form only intonation distinguishes declaratives from interrogatives in Basque, and as KCQs have their special intonation, further tests beyond intonation will be needed to see whether noncanonical questions like KCQs have declarative or interrogative properties.

## 3. The discourse particle ba

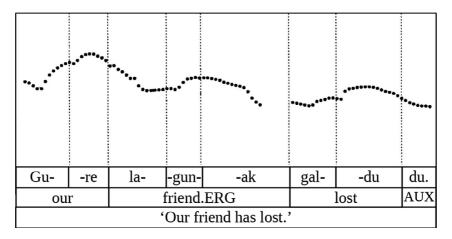
## 3.1. A brief overview of Basque discourse particles

Discourse particles are common in many languages, including Basque (a.o. Elordieta 1997, Haddican 2008, Zubeldia 2010, Etxepare & Uria 2016, Korta & Zubeldia 2016, Monforte 2020). Cross-linguistic research has distinguished two

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*Figure 1* Intonation of a neutral yes/no interrogative sentence (Elordieta & Hualde 2014: 456).





Intonation of a neutral declarative sentence (Elordieta & Hualde 2014: 443).

types of particles. Some particles merge in the TP field. In Basque, they appear to the left of the tensed verb. I will refer to this type as inner particles (InnPs). Other particles merge in the left or right periphery, and in Basque, they surface on the left or right edges of the clause. I will name them outer particles (OutPs). The former are generally evidential or epistemic particles that modulate the illocutionary strength of the proposition, whereas the latter regulate the way in which the utterance is to be understood in the conversation. The hearsay evidential OMEN is an example of an InnP, as in Example (10a), and BA, which will be analysed in depth in the remainder of the paper, is an instance of an OutP, as in Example (10b).

- (10) (a) Miren etorri omen da. Miren come INNP AUX 'Miren has come [reportedly].'
  - (b) (Ba) Miren etorri da (ba). OUTP Miren come AUX PRT 'Miren has come.'

## 3.2. Exploring the meaning dimension of BA

Basque discourse particles and, specifically BA, have not received much attention in formal linguistics. According to grammars and dictionaries (Euskaltzaindia 1990, Mitxelena & Sarasola 1987-2005, de Rijk 2008), BA has a consecutive meaning, similar to BERAZ 'therefore' but with a 'weaker illocutive meaning' (de Rijk 2008: 620). However, these approaches are too vague. Here, I will present pragmatic contexts to test the pragmatic felicity of BA, and I will analyse the meaning of the particle by using the conversational models developed by Farkas & Bruce (2010) and Malamud & Stephenson (2014).<sup>12</sup>

Let us start with initial BA in regular declarative sentences. Without a previous context, initial BA is not felicitous. Observe (11).

(11) Context: Mikel is a university professor. He teaches advanced Latin, and he knows that many students enroll without a previous Latin knowledge. It is the first day, and Mikel wants to warn the students that they should have some background in Latin.
 (#Ba) ikastaroa gainditzeko aurretik latina jakitea

PRT course pass.to before Latin know.NMLZ komeni da. recommended is 'To pass the course, it is recommended to have studied Latin beforehand.'

When it follows a previous intervention, however, BA is felicitous. In such cases, it conveys that the speaker accepts the previous intervention, and that the utterance is a reaction to it.

(12) Context: same as in Example (11)
(a) Student: Zer gomendatzen da ikasgai honetarako? what recommend AUX course this.for
'What do you recommend for this subject?'

<sup>[12]</sup> In their model, conversation is represented by the following elements. (i) Discourse Commitment (DC): each participants' public commitments; (ii) Table (T): issues to be resolved, that is, stack of proposition that has not yet entered the Common Ground; (iii) Common Ground (CG): the set of propositions that all participants have committed to; (iv) Projected CG: set of the canonical resolutions projected for each element in the table and (v) Projected DCs: set of projected commitments of each participant.

Mikel: (Ba) ikastaroa gainditzeko aurretik latina jakitea before Latin know.NMLZ course pass.to PRT komeni da. recommeded is

'To pass the course, it is recommended to have studied Latin beforehand.'

(b) Student: Nik ez dut latina aurretik eman. LERG NEG AUX Latin before give 'I have not studied Latin beforehand.' Mikel: (Ba) ikastaroa gainditzeko aurretik latina PRT course pass.to before Latin jakitea komeni da. know.NMLZ recommended is

'To pass the course, it is recommended to have studied Latin beforehand.'

Example (12) shows that BA accepts the previous move, linking the utterance as a response to the previous intervention. It marks acceptance that the speaker tackles the issue raised by the addressee. I will call this use the response-marker use of BA. In imperative sentences, initial BA has a similar effect.

(13) Leire: Asier, moztu pare bat patata. pair a Asier cut potato 'Asier, cut a couple of potatoes.' Asier: (Ba) ekarri labana, mesedez. please PRT fetch knife 'Fetch me the knife, please.'

But final BA has a different effect.<sup>13</sup> In final position, BA conveys that the speaker has already given that order and wants to insist on it. Let us see it in this example, as in Example (14).

(14) Asier: Ekarri labana, mesedez. fetch knife please 'Fetch me the knife, please.' (Leire does not fetch him the knife) Asier: Ekarri labana ba, Leire. fetch knife PRT Leire '[I told you] Fetch me the knife.'

In Example (14), both the speaker and the addressee are aware that the speaker has uttered the command but the addressee has not obeyed, so the speaker uses BA to underline that the order is already given.

<sup>[13]</sup> Final BA may appear in two surface positions: either at the end of the utterance before vocatives, or after the finite verb.

This use of BA marking the utterance as known is also observed in declaratives. This is best observed when final BA is used along with BAI 'yes'.

Context: Miren tries to sell a car to her friend Ane. (15)duzu hau baino merkeagorik topatuko kontzesionarioan. Miren: Ez NEG AUX this than cheaper find car-lot.in 'You won't find a cheaper one in any car-lot.' Ane: Bai, ez dut nahi hainbeste ordaindu. yes NEG AUX want so.much pay 'Yes, I don't want to pay so much.' Miren: Bai ba! yes PRT 'Yes BA.'

In Example (15), the expression BAI BA conveys that Miren was already committed to the idea that Ane did not want to pay so much, and suggests that her previous words implied that idea. As in the case of imperatives, BA in final position expresses that the utterance was already known by the speaker before the sentence was uttered.

So far, we have seen that BA has different functions in initial and final positions. Sentence-initially, it expresses that the speaker accepts the previous intervention, whereas in sentence final position presents the sentence content as already known. In the next subsection, I will try to give a unitary pragmatic analysis for BA and derive its two meanings from a base meaning.

## 3.3. Towards a formal account of the pragmatics of BA

If we try to account for the impact of BA in discourse using the discourse model developed by i.a. Farkas & Bruce (2010) and Malamud & Stephenson (2014), we will realise that this model is too narrow to do so.

Let us try to capture the meaning of BA in Example (12a), for instance. In this example, the propositional content P is 'it is recommended to have studied Latin beforehand', which is added to the top of the stack on the Table and to the DC<sub>S</sub>. BA's function is to mark that the speaker is aware and accepts the previous utterance q, 'what do you recommend for this subject?' However, this meaning contribution cannot be accounted for by the tools offered by Malamud & Stephenson (2014). First, it does not make sense to add q to the current or projected DCs of the speaker because it is an interrogative sentence that does not express commitment. If q were a declarative as in Example (12b), adding q to DC<sub>S</sub> would not solve any problem because the speaker does not commit to the addressee not having studied Latin before. Likewise, positing q on the Table is not opportune here. The addressee her/himself proposes q when (s)he utters it and, moreover, the speaker removes it from T when (s)he answers P. The last option is to add q to the CG, but this is not the case either. The CG comprises all the propositions that all participants commit to,

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which is not the case, since the speaker himself does not commit to Q, as we have just mentioned.

In order to adapt the model to account for BA, I propose to add a new notion: the participants' Doxastic State (DS), defined in Example (16).

(16) Doxastic State (DS): the set of a discourse participant's public and private commitments.

BA has the function of regulating the DS. I propose that BA expresses that an utterance was already in the speaker's DS prior to the utterance time. Example (16) shows this in a more formal way.

(17) BA =  $\lambda p.p \cup DS_S$  at t < t<sub>0</sub><sup>14</sup>

The difference between initial and final BA is the proposition that BA adds to  $DS_S$ . When BA is in initial position, it refers to the previous utterance (Q); when BA is in final position, it refers to the speaker's utterance itself (P).<sup>15</sup>

Thus, Mikel's utterance in Example (12a): (i) adds P (Mikel's utterance) to  $DC_S$  and to the top of the stack in T, and (ii) adds Q (the student's previous intervention) to  $DC_S$ , indicating that Q was already at the speaker's DS before his utterance, that is, P.<sup>16</sup> In contrast, in an example like Example (15), the speaker adds P to  $DC_S$ , to T and to  $DC_S$ , indicating that P was already in the speaker's knowledge, expressing that P is already known.

Thus far, I have made a review on the syntactic dimension of clause types and speech act, and I have proposed a pragmatic analysis for BA. In the next section, I will look at a Knowledge Confirmation Question in Basque, which contains this same BA, albeit with some different properties.

# 4. KNOWLEDGE CONFIRMATION QUESTION AS THE RESULT OF THE SYNTAX-PROSODY INTERFACE

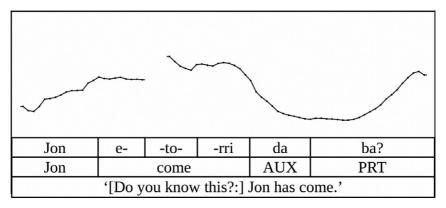
Let us now focus on the structure of Basque KCQs.

(18) (=1) Jon etorri da ba? Jon come AUX PRT'[Do you know this?:] Jon has come.'

<sup>[14]</sup> The relevance of timing of different epistemic states is also present in the EPISTEMICITY MATRIX notion by Thoma (2016: 172) (see also Heim & Wiltschko (2020b)), where the grounding is carried out before the utterance time, as in the case of BA utterances.

<sup>[15]</sup> This difference in reference has also been noted in other elements, for example, in the difference between final invariant question tags and initial response markers (Wiltschko 2021). I would like to thank the anonymous reviewer that has brought these data into my attention.

<sup>[16]</sup> The DS comprises speaker's knowledge. It contains any type of utterance that the speaker is aware of. When a question is added to the DS\_S, it means that the speaker knows that this question has been uttered.



*Figure 3* Intonation curve of a KCQ utterance.

KCQs are characterised by: (i) a declarative-like syntax, (ii) a question-like intonation, and (iii) the discourse particle BA. In this section, I will analyse the meaning of this utterance type as a result of the interaction between three elements: clause type, speech act and the discourse particle BA.

#### 4.1. KCQs are declarative sentences and question speech acts

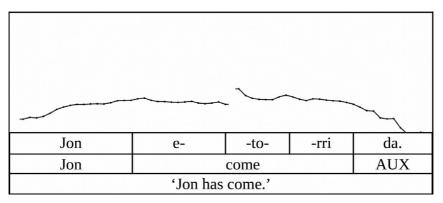
Let us first look at the intonation of KCQs (Figure 3) and compare it to the intonation of regular declarative sentences (Figure 4) and information-seeking questions (Figure 5), since it has not been done before.<sup>17</sup>

From the intonational data shown so far, I conclude that the intonation pattern of KCQs is a combination between that of regular declaratives and interrogatives. First, from an impressionistic point of view, it seems that KCQs show a higher general pitch range than declaratives, although it is not as high as in interrogatives. Second, the intonation falls between the main verb and the auxiliary, as occurs in declaratives and contrary to interrogatives. Finally, there is a final rise on the particle BA<sup>18</sup> and the utterance ends in a high intonation followed by a little fall as in interrogatives, as opposed to declaratives, which end low. Thus, I conclude that the general high pitch range and the final rise cause the KCQ to be perceived as inquisitive in conversation.<sup>19</sup>

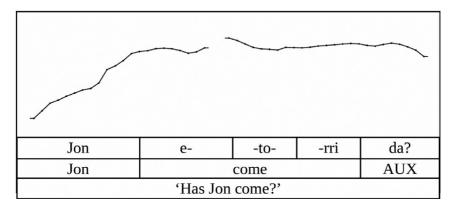
<sup>[17]</sup> The data were obtained through a directed interview with a single informant, who is a speaker of the Gipuzkoan dialect.

<sup>[18]</sup> The relation particle-intonation is also found in the work of Wiltschko & Heim (2016, 2020), Heim & Wiltschko (2020b).

<sup>[19]</sup> KCQs with BA may also have other intonational patterns, but it is noticeable that all of them share a higher intonational contour compared to declaratives. Ideally, this topic deserves an extensive and exhaustive description of intonation possibilities of BA utterances, in KCQs and other contexts. Unfortunately, such a review is impossible here for reasons of word limit.



*Figure 4* Intonation curve of a declarative sentence.



*Figure 5* Intonation curve of a yes/no interrogative sentence.

Whereas intonation presents a mixed pattern, now I will offer arguments to defend the declarative nature of KCQs that syntax clearly shows. First, when any interrogative inner particle, for example, AL, appears along with BA, the utterance cannot have a KCQ interpretation. AL is generally considered to have a yes–no interrogative clause typing function (Euskaltzaindia 1987, Hualde & Ortiz de Urbina 2003). When both AL and BA appear in a question, the result is a yes-no question that conveys counter-expectation and surprise, but a KCQ interpretation is ruled out. Consider Example (19).

(19) (a) Jon etorri al da? Jon come PRT AUX 'Has Jon come?' (b) Jon etorri al da ba? Jon come PRT AUX PRT
'Has Jon come? [I'm surprised, I didn't expect it]'
'#[Do you know this?:] Jon has come.'

Second, polarity items (PIs) like INOR 'anyone' may appear in regular interrogative sentences as in Example (20a), as well as in AL questions with BA as in Example (20b), but they are ungrammatical both in KCQs in Example (20c) and in declaratives in Example (20d).

(20)	(a)	Inor	etorri da	ı?			
		anyone	come At	JX			
		'Has anyone come?'					
	(b)	Inor	etorri	al	da	ba?	
		anyone	come	PRT	AUX	PRT	
		'Has any	one com	e? [I d	idn't ex	pect it]'	
	(c)	* Inor	etorri	da	ba?		
		anyone	come	AUX	PRT		
		'[Do yoι	1 know th	is?:] A	Anyone l	has come. (intended	)'
	(d)	* Inor	etori	i	da.		
		anyone	com	e	AUX		
		'Anyone	e has com	e. (into	ended)'		

Let us now move on to interpretation. Declarative sentences convey a commitment of the speaker towards the sentence content (e.g. Stalnaker 1978, Farkas & Bruce 2010, Malamud & Stephenson 2014). KCQs express such a commitment too. I draw this conclusion from the following pragmatic contexts. First, when the speaker utters a KCQ, the addressee may respond that (s)he is lying. This is only possible if the addressee perceives that the speaker commits to the sentence content. Declarative sentences produce the same effect on the addressee, but interrogative sentences do not. This is shown in Example (21).

(21)	(a)	<b>S</b> :	Jon e	torri da	ba?				
			Jon c	ome AUX	PRT				
		<b>'</b> S:	[Do yo	u know th	nis?:]	Jon ha	s com	ne.'	
		A:	Hori	gezurra	da.	Jon	ez	da	etorri.
			that	lie	is	Jon	not	AUX	come
		'A:	That i	s a lie. Jor	ı has	not co	me.'		
	(b)	S:	Jon	etorri	(	da.			
			Jon	come	1	AUX			
		'S:	Jon h	as come.'					
		A:	Hori	gezurra	da.	Jon	ez	da	etorri.
			that	lie	is	Jon	not	AUX	come
		'A:	: That i	s a lie. Jor	n has	not co	me.'		

(c)	S: Jon	et	orri		da?		
	Jon	cc	AUX				
	'S: Has Jor	n come?'					
	A: #Hori	gezurra	da.	Jon	ez	da	etorri.
	that	lie	is	Jon	not	AUX	come
'A: That is a lie. Jon has not come.'							

Moreover, if a speaker utters a KCQ and then says something that is incompatible with the sentence content of the KCQ, it is perceived as a contradiction as in Example (22a). Again, this effect happens with declarative sentences as well as in Example (22b), but it does not happen with interrogatives as in Example (22c).

- (22) (a) Leire etorri da ba? # Ez dut uste etorri denik, baina tira. Leire come AUX PRT not AUX think come AUX.c but anyway '[Do you know this?:] Leire has come. I don't think she's come, but anyway.'
  - (b) Leire etorri da. # Ez dut uste etorri denik, Leire come AUX AUX think not come AUX.C baina tira. but anyway 'Leire has come. I don't think she's come, but anyway.' (c) Leire etorri da? Ez dut uste etorri denik. Leire come think AUX not AUX come AUX.C baina tira.
    - but anyway 'Has Leire come? I don't think she's come, but anyway.'

So far, I have given syntactic evidence and pragmatic contexts like those presented in Examples (21) and (22) that show that, in KCQs, the speaker commits to the sentence content. These data point to the idea that KCQs are in fact declarative sentences.

However, I claim that KCQs are not only declaratives sentences but also questions, in the sense that they perform an inquisitive speech act.<sup>20</sup> First, the speaker that utters a KCQ expects an answer. When the speaker is not sure that the addressee knows the sentence content, the addressee's answer is necessary, the conversation does not continue until the issue is resolved.

A second argument is that the most accurate way to paraphrase a KCQ is through an interrogative sentence involving a verb like know or remember and an assertive embedded clause marked by the complementizer -ELA. Thus, Example (23) is the

<sup>[20]</sup> As an anonymous reviewer points out, the idea that KCQs are questions in the sense that they perform an inquisitive speech acts implies that the notion of question should be decomposed, as Heim & Wiltschko (2020a) propose.

most accurate way to paraphrase Example (18), that is, JON ETORRI DA BA? '[Do you know this?:] Jon has come.'

(23) Badakizu Jon etorri dela? know.t Jon come AUX.C'Do you know that Jon has come?'

In conclusion, KCQs are questioning speech acts, but what exactly do KCQs ask about? The best way to check it is to look at the answers. In Example (24), I compare the meaning of answering YES to a KCQ and the meaning of answering YES to a regular interrogative sentence.

(24)	(a)	S: Leire etorri da ba?
		Leire come AUX PRT
		'S: [Do you know this?:] Leire has come.'
		A: bai.
		yes.
		'A: yes. [= I know that Leire has come.]'
	(b)	S: Leire etorri da?
		Leire come AUX
		'S: Has Leire come?'
		A: bai.
		yes
		'A: Yes. [= Leire has come.]'

Moreover, answering a KCQ to decide on its polarity is ruled out, as Example (25) shows.

(25) S: Leire etorri da ba? Leire come AUX PRT
'S: [Do you know this?:] Leire has come.' A: #bai, Leire etorri da. yes Leire come AUX
'A: #yes, Leire has come.'

A canonical yes-no question like in Example (24b) denotes a set of two propositions, namely, the sentence content ('Leire has come.') and its negation ('Leire has not come.') (Karttunen 1977, Groenendijk & Stokhof 1984). Answering YES to such a question means picking up the proposition with the positive polarity between the two alternatives (Holmberg 2015). In contrast, answering a KCQ does not mean choosing between the positive or the negative alternative of the sentence content but to decide whether the person providing a response knows the sentence content or not. In other words, answering YES means to accept that the sentence content is in the answerer's DS. Consequently, KCQs are questions on whether the sentence content is in the addressee's DS.

Thus, I conclude that, in uttering a KCQ, the speaker commits to the sentence content and (s)he asks whether the sentence content is in the addressee's DS. Example (26) shows this in a formal fashion, based on the KCQ in Example (24a).

(26) Leire etorri da ba?

i. 'Leire has come'  $\cup$  DC<sub>S</sub>

ii. ASK(Sp,Ad, 'Leire has come'  $\cup$  DS<sub>A</sub>)

The contribution of KCQs should not be confused with that of tag questions.<sup>21</sup> Tag questions involve 'a tentative speaker commitment to the anchor proposition' (Malamud & Stephenson 2014: 289). Tag questions do not express direct speaker commitment but indicate that 'if P is confirmed she will share responsibility for it' (Malamud & Stephenson 2014: 291). Therefore, Malamud & Stephenson (2014) propose that in tag questions, P does not add to DC<sub>A</sub> but to the projected DC<sub>A</sub>. Regarding KCQs, the speaker expresses an independent and direct commitment to P, contrary to tag questions. Speaker's commitment to P does not depend on the addressee's confirmation, and the speaker presents P as an undeniable fact. Besides, the speaker asks the addressee whether P is already in DS<sub>A</sub>. Although both structures may seem alike at first sight, they differ substantially when analysed more closely.

Similarly, KCQ BA may also seem to convey a similar meaning as the English final discourse marker YOU KNOW? at first sight. However, closer investigation does not support this identification. Östman (1981: 23) identifies the meaning of YOU KNOW? with 'do you agree?' or 'do you see what I mean?', and claims that YOU KNOW? conveys uncertainty on the part of the speaker. However, I have already argued in Subsections 3.3 and 4.1 that KCQs convey speaker certainty. Moreover, BA acts in speech participants' DS, rather than in the agreement dimension, as YOU KNOW? does. Therefore, I do not think that KCQ BA can be translatable as English YOU KNOW?.<sup>22</sup>

In the next subsection, I will propose a syntactic analysis for KCQ in which the relation between the declarative clause type, the questioning speech act and the

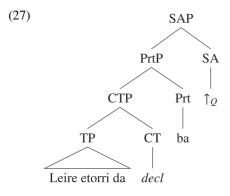
<sup>[21]</sup> It is worth mentioning that not all tag particles convey the same meaning, but there is variation across different types of tags. I would like to thank the anonymous reviewer that has placed the need for emphasising this idea here.

<sup>[22]</sup> I would like to thank the anonymous reviewer that pointed out the similarities between BA and YOU KNOW?. Furthermore, this reviewer thinks that initial BA, as in Example (12) can be identified with English initial 'declarative' YOU KNOW, and the final BA of imperatives with the insistent use of English ok?. However, I consider that Basque BA and the English discourse markers do not convey the same meaning. Regarding the former case, Östman (1981: 22) claims that initial YOU KNOW implies 'prior [...] information or agreement'. Again, BA acts in a DS dimension, regulating the speaker's knowledge, rather than her/his agreement towards the sentence content. As for the latter case, English ok? seems to imply the addressee's opposition to obey the command, and it is somehow stronger than Basque BA. Although looking at the similarities and differences between the different uses of Basque BA and the English markers already mentioned, I believe that there are enough reasons not to identify the uses of Basque BA with English YOU KNOW?, YOU KNOW... and ok?.

particle BA gives as a result the meaning of KCQs as characterised in this subsection, and raises interesting theoretical issues on the behaviour of particles and the syntactic characterisation of the speech act.

## 4.2. The syntax of KCQs

I propose that the final surface meaning of KCQs is the result of syntax. Example (27) illustrates my proposal, based on the KCQ in Example (24a)



In the structure in Example (27), the particle BA is sandwiched between the SA projection and the clause type phrase. The clause type projection types the clause as declarative, expressing the speaker's commitment to P. BA merges above CTP and, as final BA in imperatives and declaratives commented in Subsection 3.2, presents the sentence content as known information.

Finally, I propose that the 'rising' intonation contour that characterises KCQs has two effects on the utterance. First, it produces an ORIGO or context shift upon the particle BA. In Example (17), I have formalised BA's meaning contribution, claiming that it marks that the proposition was already in the speaker's DS before the utterance time. The questioning speech act alters the speaker reference of the particle and transfers it to the addressee. In other words, BA no longer refers to the speaker's DS but to the addressee's. Secondly, the intonation produces a questioning speech act. Crucially, the questioning speech act does not affect the sentence content but the particle BA. Consequently, the question is not on the polarity of the sentence content but on the value of the particle, that is, 'is P in your doxastic state?'.

This proposal makes a contribution to the syntactic representation of discourse and raises some interesting issues regarding the nature of clause types, particles and speech acts. In what follows, I will comment on the theoretical implications of this analysis.

#### 4.2.1. The syntactisation of discourse

My proposal for the analysis of KCQs in Example (27) goes along similar lines to different works on the syntactic analysis of discourse of different traditions. The Split Force proposal by Coniglio & Zegrean (2012) divides the original Rizzi's (1997) ForceP into a phrase dedicated to clause typing and a phrase that encodes speech act. KCQs show that the discursive syntactic layer must be further split. BA does not mark the clause type, nor the speech act, but it specifies the commitment expressed by the declarative clause type as being previously known. Thus, we need at least one other phrase where such meaning is encoded. This analysis fits with Paul (2014) and Paul & Pan (2017), who distinguish ForceP (which marks clause type) from AttitudeP for Mandarin, where particles like BA could be accommodated.

KCQs also show the need for a speech act projection.<sup>23</sup> Several works have pointed out this need. Haegeman (2014), Wiltschko & Heim (2016), Corr (2016), Heim & Wiltschko (2020a, b), Wiltschko & Heim (2020) and Wiltschko (2021) have proposed a bipartite structure for the speech act domain. Despite small differences in the precise characterisation of each phrase, all three coincide that the lower phrase is more 'attitudinal' (Haegeman 2014: 135), whereas the higher phrase is more 'dynamic' and encodes the what the speaker wants the addressee to do with the utterance, that is, 'call on addressee' (Beyssade & Marandin 2006, Wiltschko & Heim 2016). Wiltschko & Heim (2016, 2020), Heim & Wiltschko (2020a, b) and Wiltschko (2021) have specified the function of each layer of the speech act structure in greater detail. The higher layer, ResponseP, would regulate engagement, whereas the lower layer, GroundP, would be responsible for regulating commitment. Labels aside, the spirit of these works is consistent with my analysis of KCQs in Example (27): the SAP can be identified with the ResponseP of Wiltschko & Heim (2016), Heim & Wiltschko (2020a, b), Wiltschko (2021), since the intonation seeks addressee's engagement, as an answer is expected from the addressee. Similarly, BA fits in their GroundP, as it manages the grounding process of the utterance, relating it to addressee's Doxastic State.

Besides, KCQs go some way to supporting the idea of separating that speech act domain from the clause typing phrase, where declarative clause type is encoded in KCQs. Some proposals (e.g. Wiltschko & Heim (2016), Wiltschko (2021)) do not specify where clause typing of the clause occurs. On the contrary, KCQs show that we need at least a tripartite speech act domain: a lower phrase for clause typing, an intermediate projection for epistemic, attitudinal and discourse-related grammatical elements and a higher phrase for grammatical means that encode speech act, such as intonation.

<sup>[23]</sup> There also exist alternative accounts, within the idea of simple syntax, that reject a multi-layered left periphery in syntax, for example, Trotzke & Zwart (2014).

#### 4.2.2. Particles and operators

When analysing discourse particles, many scholars claim that particles have sentential scope (Potts 2005) and that they cannot fall under the scope of any operator. Gutzmann (2015: 252) claims that particles cannot be questioned, and links this property to their scopelessness. In contrast, KCQs demonstrate that at least some particles may be questioned. BA in imperatives and regular declaratives means that the speaker conveys that the sentence content was old information for him/her, whereas in KCQs, the speaker asks the addressee whether the sentence content is old information for them. This is clearly an instance of a questioned discourse particle: the meaning content of the particle BA is on the conversational table in KCQs.

In this regard, there is an interesting contrast between KCQs and AL questions with BA. In the case of the former, the meaning contribution of the particle is questioned, whereas in the case of the latter, the questioned element is the sentence content, and the particle BA remains scopeless, as expected with a discourse particle. This may be linked to the syntactic nature of the question. KCQs are in fact declarative sentences with an inquisitive speech act. As shown in Example (27), SAP merges above BA, which allows SA to scope over the particle. On the contrary, AL questions with BA are interrogative sentences, and its inquisitivity seems to be derived from  $CT^0$  rather than from SA<sup>0</sup>. Since the interrogative clause type merges below BA, it is clear that BA is not questioned in interrogative sentences.

In other words, the semantic arguments offered by Gutzmann (2015: 250–252) do not explain KCQs, and our data suggest that syntactic reasons may be behind the alleged impossibility of falling under the scope of sentence operators of discourse particles. In any case, this is only an exploring hypothesis. Further research is needed in order to accept or rule out this possibility, which goes beyond the scope of this paper.

## 4.2.3. Context shift and discourse particles

Some expressions (pronouns, evidentials, locative adverbs a.o.) receive a noncanonical referent in different contexts, for example, modification, conditionals, attitude contexts or questions (McCready 2007, Bylinina et al. 2014). In principle, discourse particles are not in this list. This is linked to the point addressed in the previous subsection: if discourse particles do not fall under the scope of any sentential operator and they cannot be semantically embedded, they should not undergo context shift, since the element that would cause the shift could not affect the particle. Again, KCQs show not only that at least some discourse particles as BA may fall under sentential speech act operators like questioning but also that a sentential operator may cause context shift on a discourse particle.

In Subsection 3.3, I have shown that final BA expresses that the sentence content was in speaker's DS before the utterance time. In KCQs, however, BA refers to addressee's DS. I consider that this change in the direction of the contribution of the particle from speaker to addressee is caused by the questioning speech act. When BA is in declarative sentences, it refers to the speaker's DS, whereas when it is questioned, that is, in KCQs, it refers to the addressee. Following Lam (2014) and Wiltschko (2021), we could propose that BA merges in different positions (e.g. GroundP<sub>Sp</sub> and GroundP<sub>Add</sub>, in line with Wiltschko (2021)), depending on whether it takes the speaker or the addressee as its referent. However, such an approach does not explain why the same element should merge in different positions, nor what causes this change of perspective. I rather defend that it is not accidental that context shift occurs when it is precisely the particle that is questioned, rather than the sentence content. Interrogative sentences with BA do not show context shift, but in those cases, the questioned element is the proposition, not BA. Thus, I explain BA's context shift as a consequence of BA's meaning contribution being questioned.

Context shift has been reported for elements such as evidentials. For instance, Quechua has a system of three evidential clitics, which are anchored to the speaker in regular declarative sentences. However, in questions, the direct evidential -MI and the reportative -SI 'can either be anchored to the speaker or to the addressee' and the conjectural -CHA 'is always anchored to the person who provides the answer' (Faller 2002: 230). This shows that evidentials are sensitive to context shift caused by questions. In the case of discourse particles, Döring (2011) explores the effect of shifting contexts in the German particles JA, DOCH and WOHL. She demonstrates that the only particle that is grammatical in questions, that is, WOHL, suffers context shift and expresses addressee's uncertainty towards the sentence content.

These examples raise the question whether context shift is possible in nontruthconditional elements like discourse particles. KCQs are a further argument that they are. Moreover, they constitute an interesting case of study in this respect, as in KCQs context shift only happens when the questioning speech act affects the discourse particle.

#### 5. CONCLUSIONS

In this paper, I have presented KCQs, a type of noncanonical question in Basque I consider to be worthy of more research given that it has previously been discussed very little. Throughout the paper, I have shown that KCQs constitute an interesting example to analyse the interaction between intonation and syntax in discourse.

The characteristic pragmatic import of KCQs, which can be paraphrased as 'Do you know that P?', derives from the interaction between three elements: clause type, intonation and the discourse particle P. KCQs are formally declarative sentences with the discourse particle BA, which regulates the participants' DS. The

characteristic intonation of KCQs conveys, as a result, an inquiry into the meaning contribution of the discourse particle.

KCQs represent an interesting case study, as they raise some interesting questions on the synctatisation of discourse and the properties of discourse particles. First, KCQs reinforce current theories of the syntax of discourse as a bi-layered syntactic domain (a.o. Haegeman 2014, Wiltschko & Heim 2016, Corr 2016, Heim & Wiltschko 2020a, b, Wiltschko 2021),<sup>24</sup> in addition to a dedicated phrase for clause typing (Rizzi 1997, Coniglio & Zegrean 2012). Second, KCQs are examples of a dissociation between clause type and speech act, and that the latter may be expressed by intonation (Gunlogson 2008). Third, they contradict the assumption that discourse particles cannot fall under the scope of sentential operators (Potts 2005, Gutzmann 2015), and that they cannot suffer context shift, in line with evidentials (a.o. Faller 2002) or some German modal particles (Döring 2011).

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<sup>[24]</sup> In any case, proposals that reject a multi-layered left periphery, for example, Trotzke & Zwart (2014), could also be explored.

#### CLAUSE TYPE VS SPEECH ACT

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