

# How prosody disambiguates between Alternative and Polar Questions \*

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## Abstract

This paper is concerned with the function of prosody in disambiguating Polar Questions and Alternative Questions from English. Based on data from Basque and Finnish, and existing ingredients in the literature, I propose that the underlying disambiguating principle is that the syntax-semantics mapping and the prosody-discourse mapping have to be coherent with each other. In evaluating coherence, I crucially take *Maximize Informativity* to apply to both QUD and utterance level and I propose that two criteria for coherence have to be met: there has to be a proper motherQ-daughter Q relation and a daughterQ cannot be presuppositionally heavier than its motherQ.

## 1 Introduction

Across languages, several strategies are used to disambiguate between an Alternative Question (AltQ - (1-a)) and a Polar Question (PolQ - (1-b)). Firstly, there are languages that rely on prosody. In for example English, AltQs are characterized by an accent on each disjunct and a final fall, whereas PolQs typically have a block accent and a final rise, as illustrated in (1)<sup>1</sup> [Bartels, 1999]. Secondly, there are languages that make use of a special disjunction form that forces an AltQ interpretation, as, for example, Finnish [Haspelmath, 2007] In (2-a), the usage of *vai* results in an AltQ interpretation, whereas the declarative disjunction *tai* in (2-b) leads to a PolQ reading. Third, there are languages, like Basque that make use of a combination of prosody and a special AltQ disjunction form [Saltarelli, 1988]. The combination of an accent on each disjunct and a final fall, and the disjunction *ala* results in an AltQ reading. Disjunctive questions with a block accent, final rise and the disjunction *edo* are interpreted as PolQs<sup>2</sup>.

- (1) a. Did Ana see [Boris]↑ or [Osip]↓? [AltQ]  
Which one of the following did Ana see: Boris or Osip?  
b. Did Ana see [Boris or Osip]↑? [PolQ]  
Is it true that Ana saw Boris or Osip?
- (2) a. Haluatko sokeiria **vai** kermaa? [Finnish- AltQ]  
Want.you sugar **or**<sub>AltQ</sub> cream  
b. Haluatko sokeiria **tai** kermaa? [Finnish- PolQ]  
Want.you sugar **or**<sub>PolQ/decl</sub> cream
- (3) a. [Te-a]↑ **ala** [kafe-a]↓ nahi duzu↓? [Basque-AltQ]  
tea-ART **or**<sub>AltQ</sub> coffee-ART want you-it

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<sup>1</sup>Throughout the paper, ↑ indicates a rising pitch accent L\*H- or , when used sentence final, the rising boundary tone L\*H-H% and ↓ indicates the falling boundary tone H\*L-L%.

<sup>2</sup>Many thanks to Sergio Monforte for helping me with the Basque data.

- b. [Te-a      edo              kafe-a]      nahi duzu↑?                      [Basque-PolQ]  
 tea-ART **or**<sub>PolQ/AltQ</sub> coffee-ART want you-it

In this paper, I propose that the interpretations in (1)-(3) are the result of the same underlying, independently motivated mechanisms. The key idea is that the syntax-semantics mapping and the prosody-discourse mapping have to be coherent with each other. The structure of the paper is as follows. In §2, I lay out my assumptions about the syntax and semantics of disjunctive questions. In §3, I discuss the relationship between prosody and discourse structure. In §4, I propose that the contents of §2 and §3 have to be coherent with each other. §5 serves to present the analytical tools that are used to evaluate coherence between the syntax-semantics and the prosody-discourse mapping. In §6, I apply the formalisms to the relevant data and show that the proposal makes the right predictions. In §7, I briefly discuss the advantages of the current account in comparison to prominent accounts in the literature. I conclude in §8.

## 2 The Syntax-Semantics Backbone

Let us start with the ingredients of the compositional analysis. In what follows, I make use of a Hamblin semantics for questions and take the meaning of a question to be a set of propositions that describe the possible answers to the question. The relevant ingredients for disjunctive questions are (i) disjunction, (ii) the question operator  $Q$ , and (iii) the existential operator  $\exists$ . I follow [Alonso-Ovalle \[2006\]](#) and assume a Hamblin analysis of disjunction, as defined in (4).

$$(4) \quad \llbracket \alpha \text{ or } \beta \rrbracket = \{p \in D_{\langle e, t \rangle} \mid p \in \llbracket \alpha \rrbracket^{w, g} \vee p \in \llbracket \beta \rrbracket^{w, g}\}$$

Disjunction collects the (usually) singleton propositions that are denoted by the disjuncts, resulting in an a set consisting of propositional alternatives. This set can be combined with a number of propositional operators. In the case of disjunctive questions, the relevant operators are  $Q$  and  $\exists$ . I assume a simple definition of  $Q$ , as proposed by [Biezma and Rawlins \[2012\]](#), which has as its only job to leave the alternatives generated by disjunction in tact, see (5). I assume the definition of  $\exists$  in (6) following [Shimoyama \[2006\]](#).

$$(5) \quad \llbracket Q\alpha \rrbracket = \llbracket \alpha \rrbracket \quad \text{[Biezma and Rawlins, 2012]}$$

$$(6) \quad \llbracket \exists\alpha \rrbracket = \lambda w. \exists p \in \llbracket \alpha \rrbracket : p(w) = 1 \quad \text{[Shimoyama, 2006]}$$

The alternatives that are collected by disjunction can either associate with  $Q$ , leading to an AltQ, or with  $\exists$ , resulting in a PolQ. Hence, applying the definitions for disjunction,  $Q$  and  $\exists$  to the string *Did Ana see Boris or Osip* results in two possible denotations, see (7-a) and (7-b).

- (7) a. Disjunction associates with  $Q$  : [ $Q_i$  Ana saw Boris or<sub>i</sub> Osip].  
 Hamblin set: { $\lambda w. \text{Ana saw}_w \text{ Boris}, \lambda w. \text{Ana saw}_w \text{ Osip}$ }  
 Interpretation: **Alternative Question**
- b. Disjunction associates with  $\exists$ : [ $Q \exists_i$  [<sub>IP</sub> Ana saw Boris or<sub>i</sub> Osip]]  
 Hamblin set: { $\lambda w. \exists p \in \{A \text{ saw } B, A \text{ saw } O\} : p(w) = 1$ }  
 = { $\lambda w'. A \text{ saw}_{w'} B \vee A \text{ saw}_{w'} O$ }  
 Interpretation: **Polar Question**

In short, on the syntax-semantics level, English disjunctive questions are ambiguous. For Basque and Finnish, I propose that the association properties of disjunction are encoded in the lexical

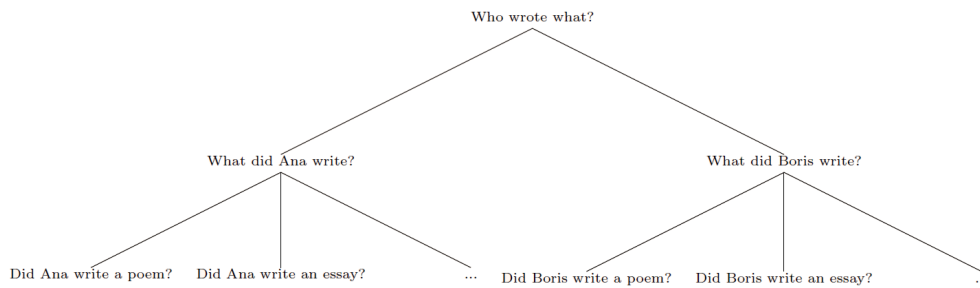
entry for disjunction<sup>3</sup>. In the case of disjunctive questions,  $or_{\text{PolQ/Decl}}$  (*tai* in Finnish/*edo* in Basque) associates with  $\exists$ .  $Or_{\text{AltQ}}$  (*vai* in Finnish/*ala* in Basque) only occurs in disjunctive questions and always forces association with Q, leading to an AltQ interpretation.

### 3 Prosody and Discourse Structure

This section serves to lay out the relationship between the relevant prosodic cues and discourse structure. I make use of the Question under Discussion (QUD) Framework [Roberts, 1996]. For this part of the proposal, I combine existing ingredients from the literature (cf. Meertens et al. [2019]) and take (i) the role of the accents on the disjuncts to be *shaping* the QUD [Roberts, 1996, Biezma, 2009] and (ii) adopt Westera [2017]’s account and argue that the final boundary tone serves to restrict/not restrict the QUD.

To begin with, I follow Roberts [1996], Büring [2003] and take discourse structure to include a stack of (often implicit) QUDs. This produces a set of hierarchically ordered, (mother and daughter) questions, as in (8).

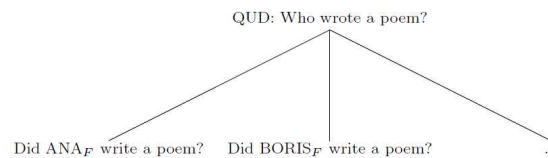
(8)



Furthermore, I adopt Rooth [1992]’s analysis of focus. An utterance  $\phi$  has an ordinary value  $\llbracket\phi\rrbracket$  and a focus semantic value  $\llbracket\phi\rrbracket^f$ . The focus semantic value consists of alternative denotations that are of the same semantic type as  $\phi$ . See, for example, the declarative in (9).

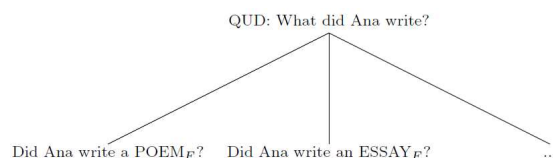
(9)  $\llbracket\text{Ana}_F \text{ wrote a poem}\rrbracket^f = \{\text{Ana wrote a poem, Boris wrote a poem, Osip wrote a poem,}\dots\}$

I follow Roberts [1996]’s and Biezma [2009]’s application of Roothian focus-marking to QUDs. They argue that the effect of focus-marking is to constrain the shape of the immediately higher question in the QUD stack. This is illustrated in (10) and (11). The immediate higher question is dependent on what element is focus marked. In other words, focal accents in the daughter question (daughterQ) signal the position of the wh-element in its mother question (motherQ).



<sup>3</sup>This is reminiscent of the Japanese particle *ka* and its association properties with indeterminate phrases [Shimoyama, 2006].

(10)



(11)

WhQ-PolQ-sequences can be used as a diagnostic for testing the relation between questions. If a WhQ can be followed by a PolQ, this PolQ is an appropriate daughterQ of the WhQ. In the case of the focal accent in PolQs, the intuitions in (10) and (11) are reflected by the (in)felicity of the sequences in (12) and (13) [Roberts, 1996].

- (12) a. What did Ana write? Did Ana write a POEM?  
 b. Who wrote a poem? Did ANA write a poem?

- (13) a. #What did Ana write? Did ANA write a poem?  
 b. #Who wrote a poem? Did Ana write a POEM?

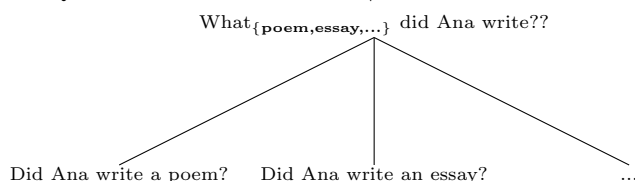
Let me now turn to the role of the falling boundary tone characterizing AltQs like (1-a). Following Westera [2017], I take the final falling boundary tone to signal that the speaker believes only the pronounced are relevant and epistemically live answers to the QUD. A final rise, in contrast, indicates that the speaker considers the possibility that there are other alternatives than the mentioned ones that are relevant and epistemically possible. This is illustrated in (14).

- (14) a. Are you from Denmark↑? → other alternatives are relevant and live  
 b. Are you from Denmark↓? → no other alternatives are relevant and live

The question with the final rise in (14-a) signals that the speaker considers the possibility that there are relevant epistemically live alternatives other than the addressee being from Denmark. Such a question is felicitous, for example, in a context in which the speaker is interested in where the addressee is from, also when it is not Denmark. In contrast, the form with the final fall in (14-b) signals that the speaker believes that the only relevant epistemically live possibility is that the addressee is from Denmark or not. Such a sentence is used, for example<sup>4</sup>, in a context in which there is a special service for people from Denmark at an airport or an insurance company. In that case, the speaker is only after a bare yes/no answer and the addressee being from Sweden or Norway is irrelevant [Westera, 2017].

The combination of the role of the focal accent in questions and the final boundary tone, as described above, results in the following trees for plain PolQs (see (15)), disjunctive PolQs (see (16)), and AltQs (see (17)) respectively [Meertens et al., 2019].

- (15) PolQ: Did Ana write a POEM↑?



<sup>4</sup>See Bartels [1999] for other uses of falling PolQs, for example Quiz Questions.

- (16) PolQ: Did Ana write [a poem or an essay]<sup>↑</sup>?  
 What<sub>{poem,essay,...}</sub> did Ana write??  
 Did Ana write a poem or an essay? ...
- (17) AltQ: Did Ana write a POEM<sup>↑</sup> or an ESSAY<sup>↓</sup>?  
 What<sub>{poem,essay}</sub> did Ana write??  
 Did Ana write a poem? Did Ana write an essay?

In the PolQ in (15), the object *poem* is focus-marked, meaning that the QUD consists of propositions that share the same VP property and differ only in the value of the object. No further constraints are imposed on the QUD, since the final boundary tone is a rise. The analysis for the PolQ in (16) is identical. The difference lies only in the size of the object and the set of alternatives that is the result of focus marking is therefore different. There are, in fact, two candidate sets of alternatives for {Boris or Osip}: the set containing {b∨o,c∨d,...} and the one à la Sauerland [2004] containing {b∨o,b∧o,b,o}. I remain neutral as to what the set exactly looks like, as it has no effect on my analysis. For the AltQ in (17), each disjunct is focus-marked, meaning that each disjunct separately contributes to the QUD. The final boundary tone is a fall, signalling that there are no further relevant epistemically live alternatives. This leads to the QUD in (17).

## 4 Syntax-Semantics and Prosody-Discourse Coherence

I propose that the prosody-discourse mapping always has to be coherent with the syntax-semantics mapping. Recall that I considered three language types. Finnish is the ‘simple’ case. The syntactic-semantic mechanism determines the final interpretation of the utterance and because prosody does not play an important role in disjunctive questions, there are no further coherence restrictions. Concerning Basque, I predict infelicity if the syntax-semantics as generated by disjunction is not coherent with the discourse structure as indicated by prosody. In the case of English, I take prosody to be the guide towards the syntax-semantics. The prosody associated with PolQs in English is only compatible with the denotation in which *or* is associating with  $\exists$  (PolQ LF) and AltQ prosody is only compatible with the semantics in which *or* associates with Q (AltQ LF). Because each available prosodic structure is only compatible with one LF, prosody on its own can get us to the right interpretation. Note that this proposal entails that the disambiguating effects of prosody in English are not encoded semantically or syntactically, but rather the result of coherence requirements.

## 5 Analytical Tools

In this section, I propose that to assess coherence, we can make use of two analytical tools: (i) *Maximize Informativity* and (ii) criteria that define a proper motherQ-daughterQ relation.

### 5.1 Maximize Informativity

Dayal [1996] proposed the principle in (18) to capture the contrast between (19-a) and (19-b).

- (18) *Maximize Informativity*: The Hamblin set of a question must contain a maximally informative true answer.
- (19) a. A: Which poet did Ana see? (= {Ana saw Boris, Ana saw Osip})  
 B: # Ana saw Boris and Osip.
- b. A: Which poets did Ana see? = ({Ana saw Boris, Ana saw Osip, Ana saw Boris  $\oplus$  Osip})  
 B:  $\checkmark$  Ana saw Boris and Osip

Applying (18) to (19-a) leads to the unavailability of the *both* answer. The conjunction of Boris and Osip is not part of the question denotation. As it would be more informative than the propositions in the set, the conjunction is ruled out as an answer. This is different for the plural, because the conjunction is part of the denotation and can thus be taken as the most informative answer, in other words, the *both* answer is available.

I follow Spector [2010] and adopt his idea that *Maximize Informativity* not only applies to constituent questions, but also to AltQs. From there it's an uncontroversial step to assume it also applies to PolQs. On top of that, I propose that (18) applies to both utterance level and QUD level. As will become clear in §6, this is a crucial component of the current proposal.

## 5.2 MotherQ-DaughterQ Relation

There are two criteria that have to be satisfied for an utterance to be a proper daughterQ to a motherQ. First, I adopt Roberts [1996]'s notion, given in (20).

- (20) A complete answer to a daughterQ  $q$  entails an at least partial answer to its motherQ  $Q$ .

This criterion is illustrated in the sequences in (21). An answer to *does she want a sandwich?* in (21-a) provides an (at least) partial answer to the question *What does Ana want to eat?* In contrast, an answer to *does she want a coke?* does not.

- (21) a. What does Ana want to eat? Does she want a sandwich?  
 b. # What does Ana want to eat? Does she want a coke?

Furthermore, I propose the novel restriction in (22) which says that a daughterQ cannot be presuppositionally heavier than its motherQ.

- (22) Any presupposition carried by a daughterQ  $q$  has to be carried by its motherQ  $Q$  as well.

Again, this is reflected by the (in)felicity of sequences. In (23-b), the first criterium is fulfilled, i.e. an answer to the question *which female professor killed the victim?* provides an (at least) partial answer to the motherQ. The sequence is still infelicitous. This infelicity follows from the definition in (22): the daughterQ carries a presupposition that is not carried by the motherQ.

- (23) a. Which professor killed the victim? Did prof. Woland kill the victim?  
 b. # Which professor killed the victim? Which female professor killed the victim?

This restriction is a crucial component of the current proposal, as will become clear in the next section. To summarize, I propose that to settle whether a daughterQ (as provided by the syntax-semantics), is coherent with the motherQ (as shaped by the prosody), the criteria in (20) [Roberts, 1996] and (22) have to be met.

## 6 Back to the Data

### 6.1 The Mechanism

In this section, I apply the described mechanisms to the relevant data. Let us start with the disjunctive PolQ LF with PolQ prosody (hence a successful PolQ) in (24). To assess coherence, let us first see what prosody gives us. The block accent on [saw Boris or Osip] generates propositions that are alternatives to *Boris or Osip*. The final rise signals that other alternatives than Ana having seen Boris or Osip could be relevant or epistemically live.

- (24) *or* associates with  $\exists$  (*edo* in Basque) [PolQ LF]  
 [Q  $\exists_i$  [<sub>IP</sub>Ana saw Boris or<sub>i</sub> Osip $\uparrow$ ]]  
 QUD-coherence:  $\checkmark$  Who<sub>{boris or osip,...}</sub> did Ana see?  
 Hamblin set:  $\{\lambda w'.A \text{ saw}_{w'} B \vee A \text{ saw}_{w'} O\}$

Now let us turn to evaluating the coherence between the syntax-semantics and prosody-discourse. As a first step, *Maximize Informativity* is applied to both the QUD and the Hamblin set. This is semantically vacuous, because both sets contain the disjunction and thus no alternatives are ruled out by the principle. The second step is to see whether the criteria in (20) and (22) are met. An answer to the question that is denoted by the Hamblin set indeed provides an at least partial answer to the QUD, and there are also no presuppositions in the Hamblin set that are not carried by the QUD. Thus, the syntax-semantics and prosody-discourse are coherent with each other.

This is different for the same PolQ LF with AltQ prosody in (25). In this case, prosody gives us a final fall that signals that the only two relevant and epistemically live alternatives are {Ana saw Boris} and {Ana saw Osip}.

- (25) *or* associates with  $\exists$  (*edo* in Basque) [PolQ LF]  
 [Q  $\exists_i$  [<sub>IP</sub>Ana saw Boris $\uparrow$  or<sub>i</sub> Osip $\downarrow$ ]]  
 QUD-coherence:  $\#$  Who<sub>{boris,osip}</sub> did Ana see?  
 Hamblin set:  $\{\lambda w'.A \text{ saw}_{w'} B \vee A \text{ saw}_{w'} O\}$

Again, to assess whether daughterQ and motherQ are coherent with each other, let us start with applying *Maximize Informativity* to both the Hamblin set and the QUD. Just as in the previous case, the net semantic effect on the Hamblin set is zero. However, when applied to the QUD, which is restricted by the final fall, it gives rise to the presupposition that exactly one out of {Ana saw Boris} and {Ana saw Osip} is true. We now run into problems if we want to check (20): The daughterQ asks whether the proposition  $\{\lambda w'.A \text{ saw}_{w'} B \vee A \text{ saw}_{w'} O\}$  is true or false. Neither the negative answer nor the positive answer to the daughterQ provides an (at least) partial answer to the motherQ that asks whether {Ana saw Boris} or {Ana saw Osip} is true. DaughterQ and motherQ are not coherent with each other, meaning that the PolQ LF is not available when the utterance is pronounced with AltQ prosody. Note that the application of *Maximize Informativity* to the QUD is partially motivated by, and necessary for, cases like (25). If it would only apply at the utterance level, cases like this could go through: The QUD would only ask about {Ana saw Boris, Ana saw Osip} and the daughterQ, that asks whether {Ana saw Boris or Osip} would provide an (at least partial) answer to that QUD.

The next case is the AltQ LF with AltQ prosody in (26). To evaluate coherence for the LF in which *or* associates with Q, consider the prosody. The accent determines the wh-word of the QUD and the final fall signals that the only two relevant and epistemically live alternatives are *Ana saw Boris* and *Ana saw Osip*.

- (26) *or* associates with Q (*ala* in Basque) [AltQ LF]  
 [Q<sub>i</sub> Ana saw Boris↑ or<sub>i</sub> Osip↓].  
 QUD-coherence: ✓ Who<sub>{b,o}</sub> did Ana see?  
 Hamblin set: {λ*w*.Ana saw<sub>w</sub> Boris, λ*w*.Ana saw<sub>w</sub> Osip}

The application of *Maximize Informativity* results in the presupposition that exactly one of the alternatives is true on both QUD and Hamblin-set level. An answer to the daughterQ provides an answer to the motherQ, hence (20) is satisfied. The presupposition is carried by both the motherQ and the daughterQ. Thus, the criterion in (22) is also satisfied.

I'm now at the final case in (27) namely the AltQ LF with PolQ prosody. The Hamblin set consists of the two propositions *Ana saw Boris* and *Ana saw Osip*. Because of the block intonation, the focus set consists of propositions that are alternatives to *Boris or Osip* and the final rise signals that there could be other relevant, epistemically live possibilities.

- (27) *or* associates with Q (*ala* in Basque) [AltQ LF]  
 [Q<sub>i</sub> [Ana saw Boris or<sub>i</sub> Osip↑]].  
 QUD-coherence: # Who<sub>{boris or osip, ...}</sub> did Ana see?  
 Hamblin set: {λ*w*.Ana saw<sub>w</sub> Boris, λ*w*.Ana saw<sub>w</sub> Osip}

Like for the other cases, the first step is to apply *Maximize Informativity* to both levels. Its application to the QUD is semantically vacuous, because the conjunction is not excluded due to a final fall. Application of *maximize informativity* to the Hamblin set gives rise to the presupposition that either {Ana saw Boris} or {Ana saw Osip} is true, and not both. Now let me turn to the criteria in (20) and (22). An answer to the question that is denoted by the Hamblin set provides an (at least) partial answer to the QUD, thus (20) is met. Coherence crashes because of the criterium in (22). The daughterQ carries a presupposition that is the result of applying *Maximize Informativity*, namely that Ana saw exactly one out of the set {Ana saw Boris, Ana saw Osip}. This is not presupposed by the motherQ, which means there is a violation of (22). Hence, the AltQ interpretation is not available with PolQ prosody.

## 6.2 Predictions

The current proposal makes two predictions. First, the application of *Maximize Informativity* accounts for the observation why AltQs, but not PolQs, give rise to exclusivity effects.

- (28) Did Ana see [Boris]↑ or [Osip]↓?  
 → Ana didn't see both Boris and Osip
- (29) Did Ana see [Boris or Osip]↑?  
 ↗ Ana didn't see both Boris and Osip

If the set {Ana saw Boris, Ana saw Osip} entails one maximally informative true answer, the conjunction is automatically ruled out, by means of it being more informative than the individual alternatives in the set<sup>5</sup> Second, we predict infelicity for utterances that are overtly

<sup>5</sup>Note that exclusivity effects are 'at issue', in the QUD sense, for declaratives, but not for questions [Farkas and Roelofsen, 2017].

- (i) a. A: Did Ana see [Boris]↑ or [Osip]↓?  
 B: # No, she saw both.  
 b. A: Ana saw [Boris]↑ or [Osip]↓.  
 B: ✓ No, she saw both



incoherent, i.e. in languages like Basque, which mark both syntax-semantics and prosody-discourse on the surface, they are not coherent with each other.<sup>6</sup>

- (30) a. # [Te-a **ala** kafe-a] nahi duzu↑?  
           tea-ART **or**<sub>AltQ</sub> coffee-ART want you-it  
       b. # [Te-a]↑ **edo** [kafe-a]↓ nahi duzu↓?  
           tea-ART **or**<sub>PolQ/AltQ</sub> coffee-ART want you-it

This prediction is borne out and the data serve as nice support for the current account.

## 7 Comparison to existing accounts

In this section I compare the current proposal to the prominent accounts in the literature from Biezma and Rawlins [2012] and Roelofsen and van Gool [2010]. A detailed review of the accounts outscopes the goals of this paper, but the key points are as follows. Both Biezma and Rawlins [2012] and Roelofsen and van Gool [2010] argue that the final falling boundary tone is the crucial ingredient for AltQ composition. Furthermore, in both accounts the final fall is given a purely semantic function. Simplified, this function is to signal the presence of an exclusive strengthening operator (in [Roelofsen and van Gool, 2010]) or an operator that exhausts the set of possible answers to the question (in [Biezma and Rawlins, 2012]). Finally, Biezma and Rawlins [2012] do not model the focal accent on the disjuncts and Roelofsen and van Gool [2010] make its semantic net contribution null. There is a number of crucial advantages of the current proposal, as compared to the described accounts. First, the present proposal accounts for the data in Basque and Finnish, which rely on other surface cues than prosody to compose an AltQ. At this point, I do not see how an account that only models the final falling intonation could account for the crosslinguistic data. Basque and Finnish encode AltQ meaning in the lexical item for disjunction, which cannot be explained if the final fall is the crucial ingredient for AltQ composition. Secondly, the current account models both the accents on the disjuncts and the final fall. Modelling both prosodic surface cues is a fundamental requirement for a satisfying account of AltQs, even if one is only concerned with English [Meertens et al., 2019]. Thirdly, Biezma and Rawlins [2012] and Roelofsen and van Gool [2010] take the exclusivity effects of AltQs to be encoded in an operator as a further stipulation. Within the current proposal, exclusivity effects follow naturally from pragmatic principles that are independently motivated.

## 8 Conclusion

I have proposed that the disambiguating effects of prosody in English are the result of coherence requirements between syntax-semantics mapping and prosody-discourse mapping. This proposal makes use of coherence requirements that are independently motivated. I have also showed that the current proposal is able to deal with crosslinguistic variation in surface cues for AltQ composition and naturally explains the exclusivity effects of AltQs in English.

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*Maximize Informativity* says it is presupposed that there is one maximally informative answer in the Hamblin set. We thus expect the exclusivity effects to be not at issue and therefore the data in (i) are accounted for.

<sup>6</sup>Thanks to Sergio Monforte for these specific data.

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