Prosody in Disjunctive Questions: Introducing Class

Erlinde Meertens[*]

1 Introduction: Class Questions

The interpretation of a disjunctive question is depends on its prosodic structure. The Alternative Question (henceforth: AltQ) interpretation is usually associated with a pitch accent on each disjunct and a final falling boundary tone, as in (1a). Questions with no specific emphasis on the first disjunct and a final rising boundary tone, as in (1b), are interpreted as Polar Questions[1] (henceforth: PolQs) (Bartels 1999, Roelofsen & van Gool 2010, Biezma & Rawlins 2012, a.o.).

(1) a. Did you cook PASta↑ or RICE↓?   [AltQ]
         'Which of the following things did you cook: pasta or rice?'
     b. Did you cook pasta or RICE↑?   [PolQ]
         'Is it true that you cooked pasta or rice?'

In recent accounts, it is often proposed that each prosodic cue, i.e. the final boundary tone and the placement of the pitch accents, has a specific semantic contribution. It has been suggested, for example, that the final falling boundary tone signals the 'closure' of a list (Biezma & Rawlins 2012, Westera 2017, Roelofsen & van Gool 2010). In this paper, I look at this discussion from a new angle: a third type of disjunctive questions[2] [3]. I will refer to this question type as Class Questions (henceforth: ClassQs), for reasons I will explain below.

(2)   Did you cook PASta…↑ or RICE…↑?   [ClassQ]

The ClassQ in (2) has four prosodic characteristics: (i) a continuation rise on each disjunct, (ii) lengthening of each disjunct, (iii) a prosodic break between the disjuncts, and (iv) a final rising boundary tone. The first goal of this paper is to explore the semantics and pragmatics of ClassQs. I will show that the semantics of these questions is far from straightforward, and that they cannot be analyzed as AltQs, nor as PolQs. Based on this, I argue for a novel analysis. The overall aim of the paper is twofold. Firstly, I expand the empirical landscape of disjunctive questions, and secondly, I open a window into the relationship between prosodic features and semantic composition in AltQs. The structure of the paper is as follows: In section (2), I compare ClassQs to PolQs and AltQs in terms of their syntactic restrictions and the specific pragmatic effects that they give rise to. In section (3), I discuss the results of section (2) and show that existing accounts do not predict this. I conclude in section (4).

2 Class Questions are not Polar Questions or Alternative Questions

---

[*] I'd like to thank Andrea Beltrama, María Biezma, Sophie Egger, Felicitas Enders, Maribel Romero and Ramona Wallner for comments and feedback. All errors are my own.

[1] The ToBi annotations for (1) are as follows.
(1) a. Did you cook PASta$_{L*H-}$ or RICE$_{H*L-L\%}$?   [AltQ]
         'Which of the following things did you cook: pasta or rice?'
     b. Did you cook pasta or RICE$_{L*H-H\%}$?   [PolQ]
         'Is it true that you cooked pasta or rice?'

[2] Please note that the question in (2) differs from the question that Roelofsen & van Gool (2010) discuss and refer to as Open Intonation Questions. They concentrate on disjunctive questions that have a rise on both disjuncts, as in (2b). I am concerned with disjunctive questions with a continuation rise and lentgthening of each disjunct, resuting in a different interpretation.
(2) a. Did you cook PASta$_{L*H-}$ or RICE$_{L*H-H\%}$?   [Open Question]
     b. Did you cook PASta $_{<len> L*H-L-}$ or RICE$_{<len> L*H-L\%}$?   [ClassQ]

[3] Note that the placement of the accents does not need to be sentence final, as illustrated in (3).
(3) a. Did Mark…↑ or Andreas…↑ write the paper?

2.1 The AltQ-PolQ spectrum

AltQs and PolQs differ, not only in the way they can be paraphrased, but also syntactically and pragmatically (Biezma & Rawlins 2012, Han & Romero 2004, Beck & Kim 2006). In this section, I explore how ClassQs compare to AltQs and PolQs in terms of those characteristics.

2.2 Syntactic Restrictions

AltQs are more restricted than PolQs with respect to their acceptability in certain embedding contexts. Firstly, Han & Romero (2004) observe that AltQs, but not PolQs are banned under biased questions with preposed negation.

(3)   a.   *Didn't Ramona teach SYNtax↑ or seMANtics↓?   [AltQ]
       b.   ✓ Didn't Ramona teach syntax or seMANtics↑?   [PolQ]

If ClassQs are like AltQs, we expect them to be banned under preposed negation as well. However, as shown in (4), ClassQs pattern with PolQs in this respect and are allowed under preposed negation.

(4)   Didn't Ramona teach SYNtax…↑ or seMANtics…↑?   [ClassQ]
          'Didn't Ramona teach syntax, semantics, or something like that'

Secondly, Beck & Kim (2006) show that AltQs cannot be used to compose multiple questions, meaning that there are no multiple AltQs containing two disjunctive phrases, and no mixed multiple questions containing a wh-phrase and a disjunctive phrase.

(5)   a.   *Who taught SYNtax↑ or seMANtics↓?
       b.   *Did RaMOna↑ or MARK↓ teach SYNtax↑ or seMANtics↓?

Again, ClassQs pattern with PolQs and can be used to compose a mixed multiple question.

(6)   Context: *You are looking for an instructor for the course 'Introduction to formal linguistics' and want to find a person who taught at least one of the following courses: Syntax, semantics, morphology, pragmatics, phonology. You ask:*

          a. Who taught SYNtax…↑ or seMANtics…↑?

Finally, AltQs are banned from embedding under *what about*, whereas ClassQs are not.

(7)   a.   *What about meeting on FRIday↑ or SATurday↓?   [AltQ]
       b.   ✓ What about meeting on FRIday…↑ or SATurday…↑?   [ClassQ]

Altogether, the data in this section show that ClassQs are not banned from syntactic environments that are known to ban AltQs, but rather pattern with PolQs. I will get back to this point extensively In section 3.

2.3 Minimality Effects

AltQs , but not PolQs, give rise to a specific pragmatic effects, of which one is *Minimality*, that is taken to be a presupposition and is defined in (8) and illustrated in (9) (Biezma & Rawlins 2012, Roelofsen & van Gool 2010).

(8) Minimality:
    At least one of the alternatives introduced by the question must be true.

(9)   a.   A: Did you cook PASta↑ or RICE↓?   [AltQ]
                B: # Neither.

	b.	A: Did you cook pasta or RICE↑?	[PolQ]
		B: ✓ Neither.	

Recent accounts have not reached consensus about what exactly causes the minimality presupposition. Biezma & Rawlins (2012) argue that the final falling boundary tone signals the presence of a closure operator [4] and that the minimality presupposition is an effect of that operator. Roelofsen & van Gool (2010) argue that the minimality effect is the result of Gricean reasoning [5]. I will return to this issue in section 3. Let me first turn to the data.

At first glance, ClassQs do not seem to give rise to minimality effects, as is shown in (10).

(10)	A:	Did you cook PASta…↑ or RICE…↑?	[ClassQ]
	B:	✓ Neither.	

A closer look at the data, however, shows that ClassQs also do not exactly pattern with PolQs with respect to minimality. The example in (11) shows that ClassQs do presuppose an effect alike to minimality.

(11)	a.	I am not sure whether you cooked something.	
		✓ Did you cook pasta or RICE↑?	[PolQ]
	b.	I am not sure whether you cooked something.	
		# Did you cook PASta…↑ or RICE…↑?	[ClassQ]

The infelicity of (11b) suggests that ClassQs do presuppose that the speaker assumes that the addressee cooked *something*. Asking a ClassQ is only felicitous if the context entails that one of the alternatives introduced by the question are true. At this point, the issue is that this alternative does not need to be one of the alternatives that are explicitly mentioned (in this case, *pasta* and *rice*), as shown in (10). At this point, the issue is what other alternative than the two explicitly mentioned alternatives this can be. Further, an answer that entails that the addressee did not cook anything seems odd, but gets better when preceded by elements that are known to cancel presuppositions.

(12)	a.	A: Did you cook PASta…↑ or RICE…↑?	[ClassQ]
		B: # I didn't cook anything.	
	b.	A: Did you cook PASta…↑ or RICE…↑?	[ClassQ]
		B: Well/Actually/Hey, wait a minute, I didn't cook anything.	

Altogether, I showed that ClassQs do not presuppose that one of the explicitly mentioned alternatives must be true. However, ClassQs do presuppose that a salient alternative must be true. I will get back to this in detail in section 3.

2.4 Exhaustivity Effects

A second pragmatic effect that AltQs are known to give rise to is exhaustivity (Biezma & Rawlins 2012, Roelofsen & van Gool 2010), as defined in (13) and illustrated in (14).

(13) Only the explicitly mentioned alternatives in the question can be true answers to the question.

(14)	a.	A: Did you cook PASta↑ or RICE↓?	[AltQ]
		B: # (No,) I cooked stew.	
	b.	A: Did you cook pasta or RICE↑?	[PolQ]
		B: ✓ (No,) I cooked stew.	

ClassQs do not seem to give rise to exhaustivity effects at first instance, as illustrated in (15).

---

[4] For a more detailed description of the closure operator, I refer to the paper.
[5] Again, for a more detailed description, I refer to the original paper.

(15)   A: Did you cook PASta…↑ or RICE…↑?   [ClassQ]
               B: ✔ (No,) I cooked stew.

There are crucial differences between PolQs on the one hand, and ClassQs on the other hand when it comes to exhaustivity. PolQs are felicitous in contexts in which there are no other alternatives available, whereas ClassQs are only allowed if there is at least one alternative available in the context that is not explicitly mentioned. This is shown in (16).

(16)   Context: *A party where the host only serves wine and beer.*
      a.   ✔ Do you want wine or BEER↑?   [PolQ]
      b.   # Do you want WINE…↑ or BEER…↑?   [ClassQ]

The set of possible answers to a ClassQ is more restricted than that of a PolQ, as shown in (17).

(17)   a.   A: Do you want a muffin or a croissANT↑?   [PolQ]
                         B: (No), ✔a doughnut / ✔a turkey sandwich.
         b.   A: Do you want a MUffin…↑ or a croissANT…↑?   [ClassQ]
                         B: (No), ✔a doughnut / #a turkey sandwich.

The PolQ in (17a) can be answered with a salient alternative that is entailed by the context (Biezma & Rawlins 2012). This set of salient alternatives is less restricted than the set of possible answers to a ClassQ. For (17a), a turkey sandwich is a felicitous answer to the question. The speaker rejects the proposed alternatives and answers with an alternative that is salient. For ClassQs, a turkey sandwich is a less felicitous answer. The intuition is that the addressee cannot answer with 'any salient alternative', but that she has to choose from a restricted set of alternatives that is bigger than the ones that are explicitly mentioned in the context, but is defined by those explicit alternatives. In the case of (17a) this would be something like 'sweet snacks that you get with coffee'. Roughly, the idea is that the alternatives that are mentioned determine a semantic class that possible answers have to belong to. Another data point supporting the idea that ClassQs signal such a class of alternatives is the observation that a ClassQ can be answered with a confirmative answer, followed by an alternative that is not explicitly mentioned, but does belong to the same class as the mentioned alternatives.

(18)   A: Do you want a MUffin…↑ or a croissANT…↑?   [ClassQ]
               B: ✔ Yeah, a doughnut.

I will get back to the implications for the semantics of ClassQs of these observations extensively in section 3. Concerning exhaustivity, I observe that ClassQs do exhaust the set of possible answers, but not till the extent that AltQs do. On the other hand, they are not compatible with exhaustive contexts, whereas PolQs are. I conclude that ClassQs are neither like AltQs, nor like PolQs.

2.5 ClassQs on the AltQ-PolQ Spectrum

In this section, I explored whether ClassQs can be categorized or analyzed as AltQs or PolQs. Firslty, I showed that in terms of their syntactic restrictions, ClassQs are like PolQs. Secondly, I demonstrated that ClassQs come with a version of the minimality presuppositions that AltQs are known to give rise to. Finally, I showed that in terms of exhaustivity ClassQs are complex and that they do not pattern with AltQs or PolQs. Altogether, I showed that ClassQs cannot me simply analyzed as PolQs or AltQs and that they require a specific analysis.

3 Towards an Analysis of ClassQs

3.1 Characterizing ClassQs

In the previous section, I argued that ClassQs cannot be modelled like AltQs or PolQs and thus

require a specific analysis. I briefly mentioned that ClassQs introduce a semantic class or category. This section serves to explain what that means and what ingredients are required to account for the specific characteristics of ClassQs. The aim of this section is not to show how to model ClassQs, but rather to show what characteristics of ClassQs require specific modelling and in what direction one could go to get to such an analysis.

I will approach the issue in a Hamblin style question semantics[6] and take the semantic denotation of a question to be the set of its possible answers. I follow Biezma and Rawlins (2012) analysis for AltQs and PolQs, as defined in (19)[7].

(19) a.   Did you cook PASta↑ or RICE↓?   [AltQ]
            {⋏w. you cooked pasta in w, ⋏w. you cooked rice in w}
      b.   Did you cook pasta or RICE↑?   [PolQ]
            {⋏w. you cooked pasta in w ∪ ⋏w. you cooked rice in w}

Various proposals on how to get to this semantics from the surface form are available (Biezma & Rawlins 2012, Roelofsen & van Gool 2010, Westera 2018). I will not discuss these accounts in detail, because taking stance in this debate exceeds the goal of this paper. The empirical contribution of this paper impacts the way in which this issue can be approached, as I will discuss later.

3.2 ClassQs denote one semantic object

Let me turn to the semantic denotation of ClassQs. The first issue is whether the set is a singleton or contains multiple alternatives. I propose that ClassQs, like PolQs, denote a singleton set. The first argument for this is the acceptability of ClassQs in contexts that ban AltQs. To illustrate this, let me go back to the example (3).

(3)   a.   *Didn't Ramona teach SYNtax↑ or seMANtics↓?   [AltQ]
      b.   ✓ Didn't Ramona teach syntax or seMANtics↑?   [PolQ]

Han & Romero (2004) argue that the infelicity of (3a) is related to the bias that the preposed negation is signaling. The embedded AltQ is denoting a set containing two alternatives with the pragmatic effect that not both alternatives can be true. The combination of this AltQ and the bias as indicated by the preposed negation lead to a crash. It is not possible to have a bias towards two mutually exclusive alternatives. ClassQs are allowed under preposed negation and it is possible to be biased towards what a ClassQ denotes, which leads me to conclude that ClassQs indeed denote one semantic object.

A second argument in favor of the idea that ClassQs denote a singleton set is the observation that they allow for a *yes* answer, as illustrated in (20).

(20) A: Did you cook PASta…↑ or RICE…↑?   [ClassQ]
      B: ✓ Yes, Pasta

Note that this contrasts AltQs, which can never be answered with *yes*, as shown in (21).

(21) A: Did you cook PASta↑ or RICE↓?   [AltQ]
      B: # Yes, Pasta

For the AltQ in (21), the *yes* answer is excluded, because the set that's denoted by the AltQ consists of two alternatives and therefore, it's not clear what the answerer is saying *yes* to. For ClassQs, the *yes* answer is allowed, meaning there is one single proposition that can be confirmed. Based on this, together with the preposed negation data, we conclude that ClassQs denote one semantic object.

---

[6] Please note that this is only for the purpose of this paper. At this point, there are no clear advantages or disadvantages.

[7] Again, this is purely for the purpose of this paper. ClassQs can be approached from different theoretical framworks and Biezma & Rawlins (2012) account has no specific advantages in comparison to other ones.

This question that this conclusion naturally raises, is what kind of semantic object this is.

3.3 ClassQs denote one undefined free variable

At this point, a tempting route would be to analyze ClassQs as PolQs. However, as I showed in section 2, there are some crucial differences between the two question types. As I hinted on briefly, ClassQs seem to define a class of alternatives, rather than a specific set. I propose that ClassQs denote an undefined singleton set, like in (22).

(22)   Context: *To a friend, in a burgerbar.*
              Do you want CHEESE…↑ or LEttuce…↑?   [ClassQ]
              ={Do you want x$_{burger\text{-}topping}$}

I argue that this denotation is a direct result of the prosodic structure of ClassQs. In this paper, I will not get into the formal mapping from prosodic structure to a denotation that is structured like this, but rather focus on the descriptive level of this phenomenon. The intuitive idea behind my proposal is that specific features are collected from the explicitly mentioned alternatives and that a semantic class is based on that. Furthermore, I propose that this semantic class and the precise value it gets at the end, is determined by the context. In the case of (22), let us assume that some semantic or pragmatic operation collects properties from the alternatives *cheese* and *lettuce* and the fact that the interlocutors are in a burger bar, resulting in the semantic class *burger toppings*. The actual value of the variable then is determined by the context. Let us take a look at the examples in (23)-(25).

(23)   Context: *A burger bar where optional toppings are: cheese, lettuce, pickles,*
              cucumber and tomatoes.
              Do you want CHEESE…↑ or LEttuce…↑?   [ClassQ]
(24)   Context: *A burger bar where optional toppings are: cheese, lettuce, pickles,*
              Cucumber, tomatoes, various sauces, crispy bacon, chilli peppers and onions.
              Do you want CHEESE…↑ or LEttuce…↑?   [ClassQ]
(25)   Context: *You're on Mars, trying to talk to an alien.*
              Do you want CHEESE…↑ or LEttuce…↑?   [ClassQ]

The value that the variable x$_{burger\ topping}$ gets is different in each context and thus, the semantics of the ClassQ is different in each context. For (23) and (24), the question denotes the possible toppings available in each bar, whereas for (25) it is less clear. Note that, although the context pragmatically restricts discourse in general, and thus the possible answers to PolQ, it never determines the semantics of PolQs and AltQs. The contexts in (26)-(28) leave the semantics of the PolQs and AltQs unaffected.

(26)   Context: *A burger bar where optional toppings are: cheese, lettuce, pickles,*
              cucumber and tomatoes.
              a.   Do you want cheese or LEttuce↑?   [PolQ]
              b.   Do you want CHEESE↑ or LEttuce↓?   [AltQ]
(27)   Context: *A burger bar where optional toppings are: cheese, lettuce, pickles,*
              cucumber, tomatoes, various sauces, crispy bacon, chilli peppers and onions.
              a.   Do you want cheese or LEttuce↑?   [PolQ]
              b.   Do you want CHEESE↑ or LEttuce↓?   [AltQ]
(28)   Context: *You're on Mars, trying to talk to an alien.*
              a.   Do you want cheese or LEttuce↑?   [PolQ]
              b.   Do you want CHEESE↑ or LEttuce↓?   [AltQ]

Altogether, I propose that ClassQs denote a singleton set, containing an undefined variable that collects features from the mentioned alternatives, based on which a semantic class is generated. This class eventually gets its value from the context in which it is uttered.

3.4 An ordered set

Finally, let us take a detailed look at the characteristics of the set that is eventually the denotation of a ClassQ. The alternatives of that set are not randomly ordered. In many cases, it this set is an ordered list with an entailment relation between the alternatives. To illustrate this, let me turn to the example in (29).

(29)   Context: *A parent discussing a birthday present for a 18 year old child.*
            Do you want a car…↑ or a motorbike…↑?

The analysis above predicts that the ClassQ in (29) is introducing the class 'vehicle' and thus generates a set containing vehicles, like the one in (30).

(30)   ⟦Do you want a car…↑or a motorbike…↑? ⟧ = {car, motorbike, scooter, bicycle, plane, train}

This denotation, however, does not capture the observation that the answer possibilities are not only restricted to alternatives that belong to the class that is introduced. Let us take a look at (31).

(31)   Context: *A parent discussing a birthday present for a 18 year old child.*
            A: Do you want a car…↑ or a motorbike…↑?
    a.   B: # A phone.
    b.   B: # A plane.
    c.   B: ✔ A scooter.

The answer in (31) is excluded because *phone* does not belong to the semantic class 'vehicle', but what about *plane*? The generalizations I made so far, predict that *plane* would be an acceptable answer to the question in (31), by means of belonging to the same semantic class as *car* and *motorbike*. I argue that the set does not contain randomly ordered alternatives, but that there is a scalar relationship between the alternatives and that the alternatives that are explicitly mentioned in the question mark the edge of the scale. In the case of (30), *car* and *motorbike* mark the edge of the scale, meaning that the addressee can only pick from alternatives that are entailed by those. I argue that in this case, the vehicles are ordered from most to less 'expensive' or 'exorbitant', as in (32).

(30)   ⟦Do you want a car…↑or a motorbike…↑? ⟧ = {plane, train, car, motorbike, scooter, bicycle}

The relationship between the alternatives is an entailment relationship; meaning that if you can get a plane for your birthday it entails that you can also get a scooter for your birthday, but not the other way around. I will not get into the semantic operation describing how the propositions that are answers to an offer are mapped from the specific question. Instead, for the purposes of this paper, I will take it to involve modality, in the sense that the speaker has the possibility to accept the offered entities. This leads is to the following Horn scale.

(31) <You have the possibility to get a plane, You have the possibility to get a train, you have the possibility to get a car, you have the possibility to get a motorbike, you have the possibility to get a scooter, you have the possibility to get a bicycle>

One argument supporting the idea that the set that ClassQs denote is ordered, is the observation that it is odd to present alternatives in a non-entailment order, as illustrated in (32).

(32)   a.   ? Do you want water…↑ or wine…↑?
            b.   ? Do you want water…↑ or a cappuccino…↑?

In the same way as for the vehicle alternatives, there is an entailment relationship between the drinks one can choose from. Intuitively, being offered a glass of wine entails being offered a glass of water. Concluding, not only is the set that is eventually denoted by a ClassQ determined by the context, this set is also ordered and the explicitly mentioned alternatives mark the edge of the scale.

3.5 Explaining the Data

Altogether, I argued that (i) ClassQs denote an underspecified set containing one object, (ii) the specification of that set is depending on the context and that (iii) the alternatives in the specified set are ordered by means of an entailment relation between them.

Let me briefly go back to the data in section (2). Recall that we investigated three aspects of ClassQs: their syntactic restrictions, the minimality effect, and the exhaustivity effect. Concerning the syntactic restrictions, I already pointed out that an analysis along the lines of the description above, would explain why ClassQs pattern with PolQs. Like PolQs, ClassQs denote one semantic object and therefore embedding under bias or WhQs is allowed. It is not entirely clear how this generalization can be built in existing accounts of disjunctive questions. Biezma and Rawlins (2012) do not go into detail about what underlies the unification of the alternatives in PolQs. Roelofsen and van Gool (2010) argue that focus marking makes the alternatives of a set collapse. Because PolQs are only focus marked at the end, i.e., there is only one pitch accent that occurs in the final disjunct, the alternatives collapse and a singleton set consisting of the unification of the alternatives is generated. ClassQs seem to undergo a different operation. The singleton set ClassQs denote is not the result of collapsing by focus marking. This would not be possible, because each disjunct is focus marked. Thus, the characteristics of ClassQs cannot be easily accounted for from the perspective of these prominent accounts.

Concerning the exhaustivity effect, the certain data points can be explained based on the analysis above. Recall that the presence of an unpronounced salient alternative in the context is a felicity condition for ClassQs, as I illustrated in (16), repeated below.

(16)   Context: *A party where the host only serves wine and beer.*
              a.   ✓ Do you want wine or BEER↑?   [PolQ]
              b.   # Do you want WINE…↑ or BEER…↑?   [ClassQ]

This can be explained by means of Grice's maxim of informativity. If you are only serving wine and beer at your party, there is a more informative way to offer your guests their drinks, namely by asking a PolQ, like the one in (16a). Therefore, the ClassQ is ruled out in this context. The exhaustivity data for ClassQs also raise questions. I showed that ClassQs are subject to the exhaustivity effect. This is controversial in the sense that the exhaustivity effect has often been associated with the final falling boundary tone in AltQs (Biezma & Rawlins 2012, Roelofsen & van Gool 2010, Westera 2017). Most likely, the exhaustivity effect in ClassQs is the result of a different operation than the effect that we observe for AltQs. However, this has to be proven first and currently challenges prominent accounts of disjunctive questions.

The observation that ClassQs get a minimality effect is puzzling and again, challenges existing accounts. Biezma & Rawlins (2012) build the minimality effect in the operator that the final falling boundary tone is introducing [8]. ClassQs do not have a final falling boundary tone, but do have a minimality effect, suggesting that minimality is originated somewhere else in the grammar than in the final falling boundary tone.

To sum up, the characteristics as described above serve to be the ingredients of an analysis of ClassQs. At this point, I do not see advantages or disadvantages of any framework when it comes to analyzing ClassQs and I believe their characteristics can be built into different theoretical approaches. However, at this point, there are some issues that need to be taken care of before doing so.

4 Conclusion

In this paper, I discussed ClassQs and showed that they pattern between PolQs and AltQs and require a specific analysis. I argued that an analysis should include at least the following three points: (i) ClassQs denote a singleton set, containing a undefined variable that describes a semantic class, (ii)

---

[8] Again, I refer to the original paper for a detailed description of the operator.

the set is defined by the context, based on which a set of alternatives is generated, and (iii) there is an entailment relationship between the alternatives in the set that is eventually generated.

The contribution of this paper is in firstly instance to broaden the empirical landscape and to describe ClassQs and show that they require a specific analysis. Secondly, it opens a window into the issue of prosody to meaning mapping in question semantics.

References

Bartels, Christine. 1999. The intonation of English statements and questions: a compositional interpretation. New York: Garland.

Beck, Sigrid & Shin-Sook Kim. 2006. Intervention Effects in Alternative Questions. Journal of Comparative Germanic Linguistics 9(3): 165-208.

Biezma, María and Rawlins, Kyle, 2012. Responding to alternative and polar questions. *Linguistics and Philosophy*, *35*(5), pp.361-406.

Hamblin, Charles L. 1973. Questions in Montague English. Foundations of Language 10(1): 41–53.

Han, Chung-hye & Maribel Romero. 2004. Disjunction, Focus, and Scope. Linguistic Inquiry 35(2): 179-217.

Roelofsen, Floris & Sam van Gool. 2010. Disjunctive questions, intonation, and highlighting. In M. Aloni, H. Bastiaanse, T. de Jager & K. Schulz (eds.), Logic, Language and Meaning: Selected Papers from the 17th Amsterdam Colloquium, 384-394. Berlin, Heidelberg: Springer.

Westera, M., 2017. Exhaustivity and intonation: a unified theory. *Institute for Logic, Language and Computation, Universiteit van Amsterdam dissertation*.

Department of Linguistics
University of Konstanz
Germany
erlinde.meertens@uni-konstanz.de