

# “Yes” and “No” according to attentive pragmatics

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## 1 Introduction

This is not *yet* a proper commentary on Farkas and Roelofsen’s work on polarity particles “yes” and “no”, although it started and will probably end as such. It is, currently, foremost an application of the pragmatic and intonational theory that I have been advancing independently, to the puzzles that they also address. I will occasionally compare particular ingredients or predictions to Farkas and Roelofsen’s theory, but this comparison will be restricted to isolated cases, and will not do justice to their motivation for doing certain things in certain ways. Conceptually, the two theories are quite different, mine relying on a detailed pragmatic theory and (I think) a simpler semantics. Empirically, I think the two theories are not that different, although my more pragmatic theory does predict how certain patterns they rigidly predict may in fact be context-dependent.

## 2 The theory

### 2.1 Semantics

I will consider as sentences only disjunctive lists, as defined by Farkas and Roelofsen, although the (mostly pragmatic) mechanisms assumed are intended to be more general than that. I assume that the conventional meaning of a disjunctive list consists of:

- **attentive content** (set of sets of worlds), basically the disjunctive list items;
- **speech act marker** (for our purposes: ASSERT or QUESTION); and
- **implicated content** (set of worlds);

I define *informative content* (set of worlds) as the union of the attentive content; it need not be separately assumed. Throughout I will call the tuple of these components a *proposition*; I will call a set of worlds (e.g., an informative or implicated content, or an element of the attentive content) a *possibility*.

I assume that declaratives and interrogatives (*ceteris paribus*) differ only in the speech act marker. For instance, (1a) and (1b) will have the same attentive and (hence) informative content, and (with the same intonation pattern) the same conventionally implicated content, but (1a) is marked as ASSERT while (1b) is marked as QUESTION:

- (1) a. John was there or Mary was there. [ASSERT]  
b. Was John there or was Mary there? [QUESTION]

These markers mean merely that conventionally, declaratives are used for assertions, and interrogatives for questions. Which speech act is performed determines which sincerity conditions (or maxims) have to be complied with; I will define a set of maxims below.

As for conventionally implicated content, I shall be concerned only with the contribution of intonation, introduced separately below. On top of this, a speech act will, when performed, *conversationally* implicate things, and this is determined by a pragmatic theory, introduced next.

### 2.2 Pragmatics

I assume, I think uncontroversially, that the context comes with (at least) two sets:

- **salient things**: propositions, entities, anything – conceived of as the set of discourse referents; and
- **relevant possibilities**: sets of worlds, jointly conceived of as a question under discussion or, perhaps more generally, those possibilities the confirmation of which would help towards reaching a conversational or extra-conversational goal.

The set of salient things is there to capture the effect of the context-change potential of speech acts, and I assume that any speech act makes salient the corresponding proposition that captures its attentive content, speech act type, and (conventionally *and* conversationally) implicated content.

The set of relevant possibilities plays a more elaborate role in conversation, for which I assume Attentive Pragmatics (Westera, 2013), in which there exist ‘informative’ (I) and ‘attentive’ (A) maxims. All these maxims should hold *according to the speaker*, not ‘absolutely’.

1. **I-Quality:** The informative content is true.
2. **I-Quantity 1:** The informative content entails as many relevant possibilities as possible, respecting I-Quality.
3. **I-Quantity 2:** The informative content entails only relevant possibilities (and things entailed by them).
4. **A-Quality:** Every possibility in the attentive content is indeed possible.
5. **A-Quantity 1:** The attentive content contains all relevant possibilities, respecting A-Quality.
6. **A-Quantity 2:** The attentive content contains only relevant possibilities.

Unlike before, I have here assumed that an asserted disjunction must itself be relevant (I-Quantity 2); it is no longer enough for it to be merely the union of two possibilities that *are* relevant, i.e., a partial answer. Further below I will discuss the repercussions of (and the reasons for) this slight change compared to my previous work.

These maxims were formulated with assertions in mind. I assume that for questions the informative (I-)maxims do not hold; only the attentive (A-)maxims hold, plus the following:

7. **Assertion-over-Question:** A question is asked only if an assertion couldn't be cooperatively made.

I intend this to indirectly capture something like 'Inquisitive Sincerity'; perhaps it is in some way too strong or too coarse, but I think its precise details will not matter for the present purposes.

In addition, because in my original Attentive Pragmatics I was not concerned with conventionally implicated content, I must here add a maxim governing its truthfulness, which I assume holds for questions and assertions alike:

8. **Implicature-Quality:** The implicated content is true.

Strictly speaking, the truthfulness of *conversationally* implicated content need not be separately required, for it is already ensured by the fact that such content is necessarily true for the speaker's cooperativity to be maintained.

### 2.3 Intonational phonology

I assume, following my work on intonation (Westera, 2014), that a high phrase accent or boundary tone (i.e. IP-final or , iP-final rise, indicated by '↗') means, as a conventional implicature, that a conversational maxim has been violated (for iP-final rises: in the respect indicated by the iP's focus). Because a cooperative speaker will not conversationally implicate anything false, and a falsehood is implicated iff a maxim is secretly violated, she will signal it if she violates a maxim (possibly, but not necessarily, by a rise). I assume that a final fall (indicated by '↘') is semantically vacuous (if anything, it may be said to convey that the maxims are complied with, but this is redundant, because such cooperativity is already presumed).

I assume that the higher the rise, *relative to* other pitch excursions in the sentence, the more important the maxim violated. (The relativization matters because the baseline size of pitch excursions is a global variable that is modified, e.g., by speaker emotivity, independently of the final rise.) On declaratives, since the most important maxim on assertions is I-Quality, a high rise conveys a lack of commitment to the informative content. A lower rise may convey that relevant live possibilities are left unattended (violating A-Quantity 1). On interrogatives, since the most important maxim on questions is A-Quantity 1, a high rise conveys that relevant live possibilities are left unattended.<sup>1</sup> Now, the difference between an I-Quality violation and an A-Quantity 1 violation typically disappears on sentences with broad focus, in which the complement of the informative content can itself be a relevant possibility, and I think most examples considered by Farkas and Roelofsen are of that type. For this reason, the height of the final rise will often not matter for our purposes, and I will always leave it implicit. Nevertheless, I think it is good to keep in mind that semantic parallelism between assertions and questions is maximal if the assertions receive a low rise and questions a high rise.

### 2.4 Discursive relevance

Unlike in previous formulations of attentive pragmatics, I have assumed that an asserted disjunction must *itself* be relevant (I-Quantity 2), i.e., that it is not sufficient for it to be merely the union of two possibilities that *are* relevant, i.e., a partial answer.<sup>2</sup> To understand the repercussions of this slight change, which will turn out to be especially relevant for "yes" and "no", we should briefly consider when disjunctions are, and when they aren't, relevant. First, a disjunction may be relevant *as such*, i.e., it may provide sufficient information for a dialogue

<sup>1</sup> A-Quantity 1 is, at least, the most important maxim for which a violation would *make sense* for a cooperative speaker.

<sup>2</sup> This change yields a new prediction that is, however, irrelevant for the present purposes: if a partial answer is not known to be (even discursively) relevant, and I think this is often not known for sure, it must be marked as '(possibly) irrelevant', e.g., by a final rise. It seems to me that, as predicted, partial answers can indeed be pronounced with a final rise (and especially rise-fall-rise), and perhaps typically *are*, something that my previous work did not even *allow*.

participant to undertake some desirable action regardless of any further information provided. In such a case, I think the disjunction should receive broad focus, rather than list intonation, and I will set it aside. Second, and more typically I think, further information will be needed to decide upon the action to undertake. In such cases, the disjunction, a partial answer, will be what I call *discursively relevant*, i.e., relevant *only* in virtue of it bringing the discourse closer to a contribution that *is* relevant as such.

The notion of discursive relevance is crucial also to understand why *negative* responses to positive initiatives can be felicitous or even mandatory, although I will only sketch what might be said about this. Under the assumption that relevance is typically not closed under negation (for this would make a pragmatic account of exhaustivity impossible, i.e., the “symmetry problem”), we can understand negative responses to positive initiatives as being typically only (potentially) *discursively* relevant. In response to a wh-question, a negative response may become discursively relevant only if no positive response is (or can be) given. In response to a positive assertion or polar question, the discursive relevance of negative responses may lie in the fact that it signals a conversational dead end, and that if disagreement is not explicitly signalled, asserted or implicated content may accidentally end up in the common ground. This is sufficient for the present purposes – it explains why negative responses can at all be felicitous or even mandatory – but a future theory will need to make this more precise.

## 2.5 The conventional meaning of “yes” and “no”

I assume that “yes” and “no” are marked as ASSERT (they are, like declaratives, conventionally used as assertions), and that they anaphorically pick up a salient proposition from the context, of which “yes” affirms the informative content, and “no” negates it. Thus, the semantics I assume is very simple; this means that the only leeway we have to account for more complex behaviour of these particles must lie in (i) the maxims and (ii) *which* salient proposition is selected from the context. Let’s see how far we get!

## 3 Predictions (and some more assumptions, in between the lines)

### 3.1 Open and closed lists

The theory outlined so far predicts the distinction that Farkas and Roelofsen draw between ‘open’ and ‘closed’ lists. If a speech act complies with the maxim of A-Quality 1, the speaker conversationally implicates that all other relevant possibilities are excluded – I will call this an *exhaustivity* implicature:

- (2) John was there. ↘  
**Con conversationally implicated:** no one else (A-Quality 1).

A high rise on an interrogative opts out from A-Quantity 1 and, thereby, exhaustivity. On a declarative, a low rise will achieve the same:

- (3) a. John was there ↗ or Mary was there. ↘  
**Con conversationally implicated:** no one else (A-Quality 1).  
 b. John was there ↗ or Mary was there. ↗  
**Con conventionally implicated:** maybe someone else.

This explains the difference between rising lists (open) and falling lists (closed)

Very coarsely summarizing, and without doing justice to their motivations, Farkas and Roelofsen instead explain the difference between closed and open lists as follows. They assume that a rise semantically contributes “or not” to their *inquisitive* meaning dimension, whereas a fall semantically contributes *exclusive strengthening* ( $\approx$  exhaustivity). I will raise a number of concerns regarding their account, none of which are, I think, decisive, but they will also serve the purpose of a sketchy first comparison. Regarding their account of the fall, it seems to me that, all things equal, a pragmatic explanation is preferable over a semantic one, the latter begging the question of how the fall (a default pitch contour) came to mean what it means. In itself I don’t think this is a serious objection. In their defense, they might say that they regard the semantic exclusive strengthening as a mere shortcut for a certain pragmatic reasoning scheme the details of which do not matter for their purposes. On the other hand, one could then object how, for the domain at hand (lists, disjunctions, answers to questions), these details could fail to matter.

In any case, my concerns regarding their account of the rise are perhaps more substantial. First, it seems to me that Farkas and Roelofsen would have to (and also do) treat list-internal and list-final rises as semantically distinct, whereas naively one would take both to be of the same kind: indicators of list unfinishedness.

Second, I think their account of the rise *might* (depending on further pragmatic assumptions) come to predict that the following is not cooperative:

- (4) I know someone among John, Mary and Bob came. (But) did John come ↗, or Mary ↗, or Bob ↗, or, say, both John and Mary? ↗

If the final rise would (roughly) add “or no one” to the question, this would add an option that is in fact known by the speaker to be false. Whether this is problematic depends on one’s pragmatic theory, and theirs is, I think, not explicit enough to tell, but a pragmatic principle that says not to weaken thy question unnecessarily or not to include false options (as my A-Quality) seems defensible. My account, on the other hand, does not run into this problem, because it conveys merely the possibility of *some* relevant alternative, i.e., not necessarily the complement (“or not”) of the entire list.

Third, as Farkas and Roelofsen observe, if speech act operators applied semantically after the (their) rise, then rising declaratives would be tautological (in comparison, in my approach the rise contributes a modal claim in the conventional implicature dimension, which does not interfere with the informative content). Whether this is as problematic as Farkas and Roelofsen say depends on the rest of one’s theory, but a priori it seems undesirable that all rising declaratives would be equivalent in precisely the dimension that seems to matter for assertions: informative content. But the solution Farkas and Roelofsen propose is perhaps not without problems, either: they assume that the speech act operator applies *before* the rise, and that the rise cancels the contribution of the speech act operator. This is a complication, and it raises the issue of what speech act operators are *for* in their approach, and, if their effect really disappears under a rise, how we could possibly know which sincerity conditions hold for rising declaratives. None of this is, I think, unresolvable in their account, but it seems that more needs to be said on this issue.

### 3.2 Relevance, irrelevance and presupposition

Because I-Quantity 2 holds only for assertions, disjunctive questions and disjunctive assertions are predicted to, *ceteris paribus*, impose different relevance requirements. For instance, (5a), but not (5b), requires that the disjunction as a whole is relevant.

- (5) a. John was there ↗, or Mary was there ↘.  
b. Was John there ↗, or was Mary there ↘?

In addition, from the Maxim of Assertion-over-Question it follows that all (conventionally and conversationally) implicated content that is *not* asserted is (deemed by the speaker) irrelevant. The reason is that an implicature must be truthful, hence the speaker *could* have asserted it, but didn’t, and the only reason can be that she deemed it irrelevant (or, e.g., inappropriate, according to maxims left implicit, but this will not be the case in our examples). Now, since both (5a) and (5b) are pronounced with a final fall, both will carry the implicature, in virtue of their compliance with A-Quantity 1, that the alternative “neither of them was there” is excluded, i.e., that John or Mary was at the party. Furthermore, in (5b) this is even *merely* implicated (and not also asserted). But then, since in (5b) the speaker implicated what she *could* have asserted, the speech act carries the implicature that the disjunction *isn’t* relevant.

What does it mean for a disjunction to be deemed irrelevant? This would imply that the speaker deemed it neither relevant *as such*, nor relevant *discursively*. For her to think it is not relevant *discursively*, she must think that the partial answer would not bring the conversation any closer to confirming some actually relevant possibility, which is the ultimate goal. For this to be the case, she would have to take herself to know either:

- (i) that no one else could provide any partial answers together with which her partial answer would bring them closer to the goal; or  
(ii) that everyone already knows the partial answer.

Now, if (i) were the case, then it wouldn’t make sense to utter (5b), for the remaining issue would not be solvable (and we know already that the disjunction as such isn’t relevant). Hence, if she utters (5b), it must be because she thinks that everyone already knows the disjunction; that it is, in this sense, *presupposed*. By using this term, I don’t mean to suggest that an explanation of this sort *must* be available for other kinds of ‘presuppositions’ as well; but perhaps at least some other kinds of presuppositions can likewise be understood as a consequence of an *irrelevance* implicature. I hope to explore this further in the future.

In sum, it follows from the pragmatic and intonational theory assumed, and in particular from the slight refinement that an asserted disjunction must be relevant, that falling disjunctive questions *presuppose* the disjunction. Falling disjunctive assertions, on the other hand, both implicate and assert that the disjunction is true; (low) rising disjunctive assertions only assert it, and rising disjunctive questions do neither. The falling disjunctive question is the only one that presupposes it. This gives us a handle to distinguish falling disjunctive questions from all the rest, which we will need to account for the distribution of “yes” and “no” below.

### 3.3 “Yes” and “no” as responses to positive initiatives

Let us consider first some rising and falling assertions:

- |     |    |  |            |
|-----|----|--|------------|
| (6) | a. | John speaks <i>English</i> ↘                     | Yes. / No. |
|     | b. | John speaks <i>English</i> ↗                     | Yes. / No. |
|     | c. | John speaks <i>English</i> ↗ or <i>French</i> ↘. | Yes. / No. |
|     | d. | John speaks <i>English</i> ↗ or <i>French</i> ↗. | Yes. / No. |

In each case “Yes” affirms the informative content of the initiative, and “No” negates it, a speech act that in each example is *discursively relevant* (as explained above). More subtle are the following two predictions. First, “Yes” in response to disjunctions (c,d) is perhaps slightly unsatisfying; it is predicted to implicate (via I-Quantity 1) that the responder does not know which language John speaks (and perhaps there are situations where merely implicating this would be impolite). Second, “No” in response to falling initiatives is predicted to be slightly more ‘dramatic’ than in response to rising initiatives; after all, the fall indicates compliance with A-Quantity 1, which requires that no relevant alternatives are conceived possible. Thus, a more welcome continuation might be, e.g., “No, but (perhaps) German”.

Let us now turn to questions:

- |     |    |   |                |
|-----|----|---|----------------|
| (7) | a. | Does John speak <i>English</i> ↗?                     | Yes. / No.     |
|     | b. | Does John speak <i>English</i> ↘?                     | Yes. / No.     |
|     | c. | Does John speak <i>English</i> ↗, or <i>French</i> ↗? | Yes. / No.     |
|     | d. | Does John speak <i>English</i> ↗, or <i>French</i> ↘? | # Yes. / # No. |

These pattern the same as the corresponding assertions in (6), except for (d), in response to which both “Yes” and “No” are very strange. This is predicted by the fact that, *only* in (d), the informative content is *presupposed* (as explained above, deriving from an irrelevance implicature). In (a) and (b) it is asserted (and in (a) also implicated), in (c) it is neither. The infelicity of “Yes” and “No” is then explained because it goes against this presupposition, by explicitly asserting or rejecting it (I think this effect of presuppositions is commonly assumed). A noteworthy prediction is that in (c), unlike its assertive counterpart, the initiative does not implicate that the disjunction is relevant, so this is a novel contribution by the response “yes” (as a consequence of which, I think, it may feel slightly more ‘imposing’ than in (6c)).

Finally, I should note that my theory predicts there to always be some pragmatic slack: provided a context can be constructed in which the right kind of proposition is especially salient, or clearly the most desirable, this may provide a suitable reference for “yes” and “no” *regardless* of the explicit initiative. For instance, the following is predicted to be better, and I think it is:

- (8) Does Igor speak English ↗ – I sincerely hope so – or, for instance – God help us! – French ↘?  
Yes, he speaks English.

I think that similar pragmatic slack is in fact predicted by Roelofsen and Farkas, who also assume that “yes” and “no” pick up a contextually salient proposition. We will see additional cases of pragmatic slack below, regarding disjunctive polar questions.

### 3.4 “Yes” and “no” as responses to negative initiatives

Farkas and Roelofsen assume that “yes” and “no” are ambiguous, in that they may mark either agreement/disagreement (basically, as I have assumed), and/or the *absolute polarity* of the response itself. Their main reason for this assumed ambiguity is the observation that “yes” and “no” seem to have these two functions in response to a negative initiative:

- (9) Peter didn’t pass the test.  
a. Agreement: Yes, he didn’t / No, he didn’t.  
b. Disagreement: Yes, he DID / No, he DID.

Here, it seems that “yes” can either mark the positive polarity of the response, or agreement of the response with the (negative) initiative, while “no” can either mark the negative polarity of the response, or disagreement with the initiative. In response to a positive initiative (10), Roelofsen and Farkas note, it just so happens that the polarity marking and agreement marking functions happen to align.

- (10) Peter passed the test.  
a. Agreement: Yes, he did / \* No, he did.

- b. Disagreement: \* Yes, he didn't / No, he didn't.

I would account for the apparent multifunctionality of “yes” and “no” (in response to negative utterances) in a different way: it’s the same function in each case (namely, affirming/negating of a salient proposition), but *relative to different, opposing propositions*. It seems to me that utterances with a negation (and, to a lesser degree, other N-words like “never”, cf. below) are typically themselves responses to an earlier positive assertion or positive polar question, which may be left implicit (as it is in (9) and (10)). This may be because we are typically interested in what the world is like, and less in what the world is not like. Thus, whenever a negative utterance is made, there will (typically) be two contextually salient propositions that oppose each other. The final respondent, using the polarity particle, can choose between these two propositions, hence she can use either “yes” or “no” for either kind of response. In sum, the availability of all four responses in (9) can be explained as follows:

- (11) I: (may be implicit) Peter passed the test. / Did Peter pass the test?  
 A: Peter didn't pass the test.  
 a. B: (relative to I's proposition) Yes, he DID / No, he didn't.  
 b. B: (relative to A's proposition) Yes, he didn't / No, he DID.

Before discussing some different predictions that my account makes compared to Farkas and Roelofsen's, let me briefly consider what might guide the speaker in choosing a particular salient proposition as a reference point for “yes” and “no”. I think that which proposition is chosen as a reference point reflects in some sense with whom B most *sympathizes*. This may be due to the fact that “yes” has an emotionally positive connotation, while “no” has an emotionally negative connotation (which may be further explained) – think about yelling “YES” vs. “NO”, say, at a sports event. In addition to confirming the salient proposition, then, “yes” may mark it as being desirable. Thus, B will choose I's proposition if her desires align with I, and A's proposition if her desires align with A. (In addition, some ‘recency’ effects may be expected to apply, the more recent propositions being standardly more salient, but I will leave this aside.)

Now, I will discuss three predictions that may set my account apart, I *think* favourably, from Farkas and Roelofsen's account. I should note, however, that at best these examples show that “yes” and “no” do not *need* to be semantically ambiguous – only context-dependent. The examples do not show that Farkas and Roelofsen could not somehow add a pragmatic theory on top of their semantics (which I think ultimately they would need to do anyway) to achieve the same.

First, under the natural assumption that a speaker will most likely use her own proposition as a reference point, the available responses for her are predicted to be more constrained. For instance (and here I make it especially explicit what A does and does not find relevant):

- (12) A: Please tell me who *didn't* pass, I don't care about those who did.  
 B: *Peter* didn't pass the test.  
 a. A: (relative to B's goal) ? Yes, he DID / ? No, he didn't.  
 b. A: (relative to A's goal) Yes, he didn't / No, he DID.

These predictions are subtle, and the pattern is not predicted to be black-or-white, but I think they are detectable.<sup>3</sup>

Second, my account predicts that the following dialogue is possible:

- (13) A: I need to know who *didn't* pass, I don't care about those who did. So, did Peter not pass?  
 B: Yes, he didn't pass.  
 C: No, he *did*.  
 B: Yes he *didn't*!  
 C: No he *did*!  
 etc.

Here it seems to me that B's second response is fine. It is (according to Farkas and Roelofsen) a negative response (“he didn't”) to a positive initiative (“he did”, C's first utterance). Indeed, it is of the kind that received a hashtag in (10) and which is ruled out by Farkas and Roelofsen's approach – so what is going on? My theory predicts it to be felicitous here because this *is* a case where a positive response (C's first response) is preceded by a negative one (B's first response), a case that we deemed atypical before.<sup>4</sup> If my observation is correct,

<sup>3</sup> The Maxim of I-Quantity may yield ignorance implicatures here that could interfere with one's judgements here, so it is perhaps safest to imagine a context in which the Maxim of I-Quantity does not hold for A, e.g., let's say A is a teacher testing a student.

<sup>4</sup> Furthermore, by using polarity particles from the start, both B and C leave no mistake about them both arguing relative to A's (negative) proposition. I think this is not crucial, but it may increase the felicity nevertheless because otherwise one may (more) easily lose track in this forest of negations.

this suggests that the use of “yes” and “no” is indeed a matter of finding the right salient proposition. Thus, although Farkas and Roelofsen manage to capture a *typical* pattern (with primary goals being positive), their theory may be inaccurate in semantically ruling out a scenario like (13).

Third, it seems that the intrinsic polarity, needed for Farkas and Roelofsen’s account, is in fact not the binary feature they assume it is. Brasoveanu et al. (2013) compared sentences containing negation, N-words like “never”, and DE quantifiers, regarding their range of responses. They discovered that negation-containing sentences pattern as in (9), and that ‘positive’ initiatives (no negation, N-words or DE quantifiers) pattern as in (10); but the rest falls *in between*. In light of this, Farkas and Roelofsen would have to amend their account by replacing the plus and minus polarity features by a *degree* – either *that* or give a pragmatic story of how a binary feature can yield gradient behaviour.

In my account, however, an explanation of the latter kind is already available, if we assume the following: pure negative sentences are more typically used in a context with two opposing salient propositions than sentences with N-words or DE quantifiers, which in turn are more typically used in such a context than purely ‘positive’ sentences. I think this is quite natural. Now, since Brasoveanu et al.’s experiment does not fix the salient propositions in the experimental context, participants are left to guess what these must be like, and they will do so based on the typical usage (for what else is there to go on?) and respond accordingly, i.e., mixed for negations, less mixed for N-words and DE quantifiers, and quite uniformly for positive sentences. To test this explanation, one might redo their experiment whilst controlling for the salient propositions available (as in (12)). It is predicted that then any sentence can be more or less forced into the ‘negative’ or ‘positive’ category by manipulating the salient propositions.<sup>5</sup>

Thus, my theory predicts the same ambiguity at the level of speech acts that Farkas and Roelofsen instead assume in their semantics, as well as suggest how a context may favour one reading over another. But regardless of *how* this ambiguity is predicted, it follows that an explicit pre-jacent (e.g., “he didn’t”) may be necessary to disambiguate, i.e., that *bare* particle responses may be less felicitous, as observed by Farkas and Roelofsen (and in experimental work they cite):

- (14) A: Peter didn’t call. / Did Peter not call?  
B: ?Yes. / ? No.

In addition, *my* theory predicts a similar context-dependence here as for the non-bare responses above: if there is one particularly salient proposition, bare responses are predicted to be acceptable. This seems to be borne out:

- (15) A: I need to know who *didn’t* pass, I don’t care about those who did. So, did Peter not pass?  
B: Yes. / No.

Note that it is not predicted by my account that these should be completely perfect, but merely that context can improve them, that context may shift the likelihood of a certain interpretation of “yes” and “no” at least to the point where they may be somewhat felicitous.

Finally, I think the above may connect to the difference between *high-negation* and *low-negation* sentences, namely that the former are typically asked when (if I remember correctly) the speaker is biased in favour of the positive proposition but the context seems to be biased against. An explanation might run as follows. High-negation sentences are more naturally conceived of as negative responses to a positive initiative (for they may be just the positive initiative plus a negation on top of it). Now, perhaps the bias in favour ought to be analysed as one of *desirability* rather than of likelihood (as I think is more common in the literature?), which could be explained in terms of the fact that the high-negation polar question ‘indicates’ that the actual goal is the underlying positive proposition, the negative one being merely *discursively* relevant. But the details of this, as well as other potential explanations, must be left to future work.

### 3.5 “Yes” and “no” as responses to disjunctive polar questions

As Farkas and Roelofsen observe, a disjunctive polar question (16a) does not pattern with the falling disjunctive list question (16b) that we discussed earlier (7d):

- (16) a. Does John speak English ↗, or does he not speak English? ↘  
      ??? Yes. / Yes, he does. / ??? No. / No, he doesn’t.  
      b. Does Peter speak English ↗, or French ↘.  
      # Yes. / # Yes, he speaks English. / # No. / # No, he speaks French.

<sup>5</sup> Such an experiment would be in line with the methodology used in (Westera and Brasoveanu, 2014) on ignorance implicatures.

The non-bare responses are fine in response to (16a), unlike (16b) (and recall that the infelicity in (16b) was explained in terms of the disjunction being presupposed). Now, recall that (7d), i.e., (16b), could be improved by making one or the other disjunct particularly salient or desirable, in which case “yes” and “no” would refer no longer to the disjunction as a whole, but (apparently) to the disjunct that happened to correspond with the contextually salient proposition. This suggests the following explanation: (16a) already by itself suggests such a context, in which only *one* of the disjuncts is salient, because the disjunction as a whole is a tautology, the affirmation of which by “yes” would be vacuous and the rejection of which by “no” would be contradictory. In virtue of this, (16a) tells us that one of the disjuncts is to be picked up by “yes” and “no”, rather than the disjunction as a whole. It doesn’t yet tell us, however, *which* disjunct this is – the positive or the negative one, and that is why bare particle responses are strange, although, as in (15), they are predicted to improve with a context that tells you which disjunct is the salient one.

Relatedly, as Farkas and Roelofsen observe (in footnote 32), though slightly generalizing, bare particle responses may become more felicitous if the second, negative disjunct in (16a) becomes shorter, up to complete felicity (it seems) in response to a *tag question*:

- |      |                                  |                    |
|------|----------------------------------|--------------------|
| (17) | a. Was John there, or wasn’t he? | ?? Yes. / ?? No.   |
|      | b. Was John there, or wasn’t he? | ? Yes. / ? No.     |
|      | c. Was John there, or not?       | (?) Yes. / (?) No. |
|      | d. John was there, wasn’t he?    | Yes / No.          |

I think this is again suggestive of the same explanation: these asymmetric disjunctions and tag question reflect that the positive disjunct corresponds to the more salient proposition.

In sum, particle responses are fine in response to a disjunctive polar question, because, since they cannot cooperatively pick up the disjunction as a whole, they must pick out a disjunct. If, in addition, it is known which disjunct is the most salient one, even bare particle responses become fine.

#### 4 Final remarks (for now)

The theory I have advanced is superficially very different from Farkas and Roelofsen’s theory. The main conceptual difference lies in how we divide labour between pragmatics and semantics. Farkas and Roelofsen’s assume a simpler pragmatic theory, which they do not make wholly explicit, as a consequence of which their account relies on a more intricate semantics. I find my semantic theory simpler, foremost in the fact that questions and assertions are assumed to differ only in what kind of speech act they are. The pragmatic theory I have assumed, although more complex, is almost completely independently motivated.

The main empirical differences seem to reside in the pragmatic slack and context-dependence that my theory allows. I hope to have shown that this does not compromise the ability of the theory to yield strong, fine-grained, testable predictions – what it takes is an explicit pragmatic theory, that tells us *how* the predictions depend on the context. On the *typical* cases however, it seems that my theory and Farkas and Roelofsen’s perform largely alike. I think that at least in some respects their approach can be regarded as ‘semanticizing’ the most *typical* uses of “yes” and “no”. That is, the two approaches may not be as incompatible as they seem, mine perhaps being an explanation of (some parts of) theirs. Nevertheless, of course a much more detailed empirical comparison must be made – I hope to give a translation between their concepts and mine, so that we may better see where the correspondences and differences lie.

I have not discussed the markedness considerations underlying Farkas and Roelofsen’s theory, and this is unfair, because it is what makes their theory *explanatory*. One could even say that these considerations are part of what could be *their* pragmatic backbone. Nor have I discussed the cross-linguistic application of their theory. An evaluation of these attractive features of their theory must be left to future work.