ABSTRACT: There is cross-linguistic variation regarding how negative yes/no-questions are answered. In some languages a negative question is answered in the negative to confirm the negative alternative, in other languages a negative question is answered in the affirmative to confirm the negative alternative. Some languages have a mixed system, where the form of the answer depends on the exact syntax of the negative question. English is one such language. It is argued that there are three negations in English: n't and two types of not, one with IP-scope, one with VP-scope. The choice of answer form to a negative question (yes or no) depends on which negation is deployed in the question. If the negation in the question is the lower kind of not, the answer yes will confirm the negative alternative. This is explained in that the answer is an elliptical expression where the ellipsis depends on the syntax of the question.

KEYWORDS: questions, polarity, negation, scope of negation, yes
I am interested in the syntax and semantics of such answers, in the languages of the world. It may seem odd to talk about the syntax of expressions which typically consist of just one word. However, when we consider a wider range of languages and a wider range of yes/no questions, it will become apparent that there is some interesting and intriguing variation regarding the form, the meaning, and the use of answers to these questions, and this variation can be understood if we assume that these expressions have syntactic structure, even when they consist of just one pronounced word.

To begin with, while many languages employ a particle like English yes for affirmation, other languages ‘echo’ the verb of the question as an affirmative reply, as in the following example, from Tamil (based on Asher 1985).

(2) — nii neettu katekki pooneyaa? [Tamil]
   ‘Did you go to the shop yesterday?’

   — pooneen
   go.PAST.1SG
   ‘Yes.’

   — pookale
   go.INF.NEG
   ‘No.’

These expressions do have some syntactic structure. In the case of the affirmative answer we know this because it has tense and subject agreement inflections. Tense is a property of sentences, so the presence of tense indicates sentential structure (even though all that is actually pronounced of the sentence is an inflected verb). Subject agreement means that there is a subject present, even though it isn’t pronounced. The one-word affirmative answer is thus a complete sentence, although only a part of it is normally pronounced, and so is, by hypothesis, the negative answer. They convey essentially the same meaning as the full sentences (3) and (4), by hypothesis because they are reduced versions of full sentences.2

2 See Holmberg (2001) on Finnish, Martins (1994) on Portuguese, Jones (1999) on Welsh. These are all languages which, like Tamil, employ the verb-echo strategy for affirmative answers. The details of the derivation of such answers are discussed in these works. The full sentences (3) and (4) can be used as answers to the question in (2) under certain conditions, for example if the respondent wants to focus a particular constituent of the answer: ‘I went to the shop YESTERDAY (but I’m not going TODAY)’.
One question that interests me is what the exact rules are by which such reduced expressions are derived, in the various languages which employ this system.

Another related question is whether yes/no answers in languages like English are actually also reduced versions of full sentences, so that the answers to the question in (1) are actually reduced versions of the answers in (5):

(5) — Yes I speak Tamil.
    — No I don’t speak Tamil.

I will demonstrate in this paper that this is indeed the case: One-word answers to yes/no-questions are reduced versions of full sentences not only in Tamil, and other languages which employ what I will call the verb-echo system, but also in English, and other languages which employ what I will call the particle-system.

Another point where there is variation is in answers to negative questions. Consider example (6):

(6) — Don’t they drink coffee?
    — No. (= They don’t drink coffee.)

In English, if you want to confirm the negation of a negative question, you do it by using the negative particle *no*. This is a common system. However, there are also many languages where you use the affirmative answer form in this case. Chinese employs this system.³

(7) — keoidei m jam gaafe? [Cantonese Chinese]
    they not drink coffee
    ‘Do they not drink coffee?’

³Thanks to Patrick Chi-Wai Lee for the data.
What I here call the truth-based system (following Jones 1999), is also called the ‘agree/disagree system’ (Pope 1976), Zwicky & Sadock (1985), the idea being that the affirmative answer always indicates agreement with the speaker, and the negative answer indicates disagreement with the speaker. Hence if the question is negative, conveying a negative presupposition on the part of the speaker, the affirmative answer confirms the negative presupposition while the negative answer contradicts it. I prefer the notion ‘truth-based system’ mainly because although you can agree with the expected answer of a leading question, you can’t, by definition, agree with a neutral question.

The English system is sometimes called the polarity-based system: The negative answer no reflects the polarity of the proposition: ‘No (they do not drink coffee)’. The Chinese system is often called the truth-based system, since the affirmative answer affirms the truth of the negative proposition: ‘Yes (it is true that they do not drink coffee)’.

According to my data so far, about half of the languages of the world employ the English system, half the Chinese system (so far I have data from about 60 languages distributed over the whole world). There are also languages which appear to employ a mix of the two systems. According to Wali & Koul (1998), Kashmiri is one such language: If the question is negative, the negation can be confirmed by saying either na: ‘no’ or a: ‘yes’.

(8) — az chu na: gar m? [Kashmiri: Wali & Koul 1998]
   today is not hot
   ‘Isn’t it hot today?’
   — na:, az chun gar m.
   ‘No, it isn’t hot today.’
   — a:, az chun gar m.
   ‘Yes, it isn’t hot today.’

Japanese is well known as a representative of the truth-based system. However, the following examples show that the answer to a negative

4 What I here call the truth-based system (following Jones 1999), is also called the ‘agree/disagree system’ (Pope 1976), Zwicky & Sadock (1985), the idea being that the affirmative answer always indicates agreement with the speaker, and the negative answer indicates disagreement with the speaker. Hence if the question is negative, conveying a negative presupposition on the part of the speaker, the affirmative answer confirms the negative presupposition while the negative answer contradicts it. I prefer the notion ‘truth-based system’ mainly because although you can agree with the expected answer of a leading question, you can’t, by definition, agree with a neutral question.
yes/no-question actually depends on the expected answer. (9) is a standard example of the truth-based answering strategy.\(^5\)

\[(9) \quad \text{— Kimi tukarete nai?} \]
\hspace{0.5cm} you tired not
\hspace{0.5cm} ‘Are you not tired?’
\hspace{0.5cm} — Un, tukarete nai.
\hspace{0.5cm} yes tired not
\hspace{0.5cm} literally: ‘Yes, I’m not tired,’ i.e. in English ‘No, I’m not tired.’

But in (10), if it is pronounced with an intonation, which indicates that the speaker is fishing for a positive answer from the interlocutor, the affirmative answer to the negative question does not confirm the negation, but instead confirms the expected positive answer.

\[(10) \quad \text{— Kore oisiku nai?} \]
\hspace{0.5cm} this delicious not
\hspace{0.5cm} ‘Isn’t this delicious?’
\hspace{0.5cm} — Un, oisii.
\hspace{0.5cm} yes, delicious

Without having yet investigated the matter, I venture the guess that the two answers in Kashmiri also depend on the precise meaning of the question, including, perhaps, the expected answer. In the following I will show that English, too, exhibits a kind of mixed system as regards answers to negative questions. This is the focus of the present paper. I will show that the English mixed system has a syntactic, structural explanation, being ultimately due to the fact that English has two distinct negations both pronounced \textit{not} (in addition to having the contracted form pronounced \textit{n’t}).

\section*{1. ANSWERING NEGATIVE QUESTIONS IN ENGLISH}

It turns out that English, too, has a kind of mixed system (recently discussed in Kramer & Rawlins 2010, 2011 and Holmberg 2013).

\(^5\) Thanks to Ayaka Sugawara for the examples and discussion of the Japanese case.
Consider the following exchange.

(11) — Is Mary not coming?
— No. (= Mary is not coming.)
— Yes. (= %Mary isn’t coming.)

All speakers of English agree that the answer No confirms the negation of the question, as expected under the polarity-based system. But somewhat surprisingly, some speakers consider the affirmative answer Yes to be an alternative way to confirm the negation of the question (the % sign symbolizes the fact that not all speakers agree with this judgment). That is to say, for these speakers yes and no as answers to a negative question mean the same thing. Kramer & Rawlins (2010, 2011) refer to this as negative neutralization: In answers to certain negative questions the usual difference between yes and no is neutralized.

Note that this does not mean that these speakers employ a truth-based answering system exactly like Chinese or Japanese. As shown above in example (7), in Chinese the answer ‘yes’ as an answer to a negative question confirms the negation, while the answer ‘no’ disconfirms the negation. That is to say, ‘yes’ and ‘no’ have opposite meanings, while in the relevant variety of English ‘yes’ and ‘no’ have the same meaning, as answers to a negative question.

Note also that this is only the case when the negation in the question is not. When the contracted form n’t is used, in which case the word order in the question is different (the negation preceding the subject), all speakers agree that the only way to confirm the negation is using No.

(12) — Isn’t Mary coming?
— No (= Mary isn’t coming.)
— ?Yes.

Insofar as the affirmative answer can be interpreted it means that Mary is coming (contradicting the negation of the question). In fact, for reasons I will come back to, a plain answer Yes is infelicitous in this case (indicated by the ?); the fully grammatical answer, if we want to contradict the negation, is Yes she is.
Kramer & Rawlins have found other cases of negative neutralization. Consider (13):

(13) — Do they not speak English?
     — Maybe (so).
     — Maybe not.

The two answers here can be synonymous, both meaning that they maybe don’t speak English; this is another case of negative neutralization. (14) is yet another example:

(14) — Is Mary not coming?
     — If so, it will be fun.
     — If not, it will be fun.

Again, the answers can be synonymous: affirmation and negation appear to mean the same thing here: If Mary is not coming, it will be fun.

Note that, again, this is the case only when the negation word is not. If the contracted form n’t is used (with the required change of word order), the negative and affirmative answers are not anymore synonymous.

(15) — Don’t they speak English?
     — ?Maybe (so).
     — Maybe not.

Insofar as we can assign an interpretation to the affirmative alternative, it means that they maybe do speak English, while obviously the negative answer means that they maybe don’t.

How can we explain these facts? Why is the choice of negation (n’t or not) crucial? Kramer & Rawlins’s explanation is based on the assumption that answers to yes/no-questions are complete sentences, where the propositional part is usually deleted, i.e. not pronounced, which it can be because it is identical to the proposition of the question. The structure of the yes/no-question *Is Mary not coming?* is basically as in (17):

(17)  is \[ \text{T}_\text{PR} \text{ Mary <is> not coming } \]
Here ‘TP’ (tense phrase) is the label of the finite (tensed) sentence. The auxiliary is moves out of the TP, to form the word order indicating a question. ‘<is>’ is a silent copy of the moved auxiliary, indicating that the auxiliary and the tense carried by it are still interpreted as constituents of the TP. Now the affirmative answer has the following structure:

(18) yes \[ _{TP} \text{Mary is not coming} \]

This is a simplified version of Kramer & Rawlins’s analysis. I will come back to a more detailed account below.

Deletion (or ellipsis) as a syntactic operation is subject to the condition that the deleted part of the sentence (the part not pronounced) must be identical to a corresponding, but pronounced, part of an immediately preceding sentence. In a question-answer pair, the part of the answer which is identical to that of the question can be, and usually is, deleted. Hence, in the answer (18), where the TP is identical to that of the question (17), the TP can be, and usually is, deleted, leaving only the affirmative particle yes pronounced.

(19) yes \[ _{TP} \text{Mary is not coming} \]

The meaning is, however, determined by the content of the TP in conjunction with the affirmative particle, and can be paraphrased as ‘I affirm that Mary is not coming’.

As discussed, the answer no has the same meaning. Again, the structure will be (20), exactly the same as in (19), except for the negation particle.

(20) no \[ _{TP} \text{Mary is not coming} \]

The meaning is, again, determined by the meaning of the TP in conjunction with the particle. This is where the polarity-based system employed by English kicks in: The negation particle is not interpreted as negating the proposition; if it did, the meaning would be, roughly, ‘I negate that Mary is not coming’, i.e. ‘I state that Mary is coming’. Instead, the negation enters a *concord relation* with the negation inside TP:
effectively, they form a complex negation together\(^6\). Thus the meaning is ‘I state that Mary is not coming’.

As mentioned, if the question is formed using the contracted form n’t of the negation, negative neutralization does not occur.

(21) — Isn’t Mary coming?
    — ?Yes.
    — No.

While no still confirms the negation of the question, the answer yes, insofar as we can assign an interpretation to it, means that Mary is coming (below I will return to the question why this is actually not always a well-formed answer). Kramer & Rawlins propose that this is because the negation particle, which in this case is pronounced outside TP, as an affix on the fronted auxiliary, is also interpreted outside TP. That is to say, there is no negation inside TP. The derivation of this question would, very roughly, be as in (22)\(^7\):

(22) -n’t \[ TP Mary is coming \] \(\rightarrow\) is-n’t \[ TP Mary <is> coming \]

The answer yes now has the structure (23), where the TP can be deleted because it is identical to the TP of the question:

(23) yes \[ TP Mary is coming \]

The meaning, consequently, is the opposite of the meaning of (19).

2. AN ALTERNATIVE THEORY

So far we have seen Kramer & Rawlins’s account of answers to yes/no-questions in general, and negative questions in particular. What they do

\(^6\) Kramer & Rawlins assume that this is essentially the same negative concord relation found in many languages, including colloquial English, in expressions like I don’t know nothing about it, where the two negations don’t cancel each other out, but rather strengthen each other.

\(^7\) Kramer & Rawlins are, in fact, not entirely explicit as regards the structure of questions with n’t.
not account for is why native English speakers disagree regarding the interpretation of answers to negative questions with *not*; only some speakers get the negative neutralization effect. Furthermore, they don’t account for why the answer *yes* to a negative question with *n’t*, as in (21), is perceived as not quite well-formed.

Consider first the speakers who do not interpret the answer *Yes* in (24) to mean ‘Yes, Mary is not coming,’ but rather consider it not to be a well-formed answer at all.

\[(24) \quad \text{— Is Mary not coming?} \]
\[\text{— ?Yes.} \]
\[\text{— Yes she is.} \]

These speakers don’t interpret this as negative neutralization, i.e. meaning that Mary is not coming. However, they don’t quite accept the opposite interpretation of *yes*, either, namely that it means that Mary *is* coming. Instead, to convey that meaning, they would use *Yes she is*.

This can be understood if we adopt the theory of questions and answers in Holmberg (2001, 2007, 2013). The theory can be summarized as follows:

The polarity of a sentence is the property of being affirmative or negative. Affirmative declarative sentences have affirmative polarity, formally a feature [+Pol], negative declarative sentences have negative polarity, formally [-Pol]. Yes/no-questions have, as a defining property, open (or unspecified) polarity, formally [±Pol]. Consider again the question (25):

\[(25) \quad \text{Is Mary coming?} \]

The point of the question is to find out which alternative is true: Mary is coming or Mary is not coming? That is to say, the question leaves the polarity of the proposition open, and invites the interlocutor to provide the missing polarity value (i.e. to say which alternative is true). Formally, I assume that there is a [±Pol] feature in the sentence, along with other formal properties such as tense and mood, as part of the TP.

\[(26) \quad \text{Is }_{\text{TP}} \text{Mary } [\pm Pol] \text{<is> coming}] \]
Now, what the answer does, is provide a value for the unspecified polarity. In English it does so by means of the answer particles yes and no. As in Kramer & Rawlins’s theory, the answer is made up of a copy of the TP of the question, which is normally not pronounced (because it is a copy and therefore need not be pronounced), plus an answer particle.

\[(27) \text{Yes}_{[+\text{Pol}]} \begin{array}{c} \text{TP} \\ \text{Mary} \end{array} \begin{array}{c} \pm \text{Pol} \end{array} \text{is coming} \rightarrow \text{Yes}_{[+\text{Pol}]} \begin{array}{c} \text{TP} \\ \text{Mary} \end{array} \begin{array}{c} + \text{Pol} \end{array} \text{is coming} \]

Yes is marked [+Pol] and assigns that value to the unspecified polarity feature of TP (formally this is an operator-variable relation), so the meaning of the answer is ‘Mary is coming’. Usually the TP is not pronounced. Correspondingly, no is marked [-Pol] and provides that value for the unspecified polarity feature of TP, which yields the reading ‘Mary isn’t coming’.

Now consider what happens if the question contains a negation.

\[(28) \text{Is}_{[-\text{Pol}]} \begin{array}{c} \text{TP} \\ \text{Mary} \end{array} \begin{array}{c} \text{is} \end{array} \begin{array}{c} \text{not} \end{array} \begin{array}{c} - \text{Pol} \end{array} \text{coming} \]

The negation not is marked [-Pol], that is the definition of (sentential) negation. The answer yes will then have the following structure (recall that the deleted/unpronounced TP of the answer must be a copy of the TP of the question, or else it couldn’t be deleted).

\[(29) \text{Yes}_{[+\text{Pol}]} \begin{array}{c} \text{TP} \\ \text{Mary} \end{array} \begin{array}{c} \text{is} \end{array} \begin{array}{c} \text{not} \end{array} \begin{array}{c} - \text{Pol} \end{array} \text{coming} \]

This is a contradiction (or feature clash): The particle yes wants to assign positive value to an unspecified polarity feature, but the sentence has a negatively specified polarity feature. This, I claim, is why many speakers of English are unhappy with the question-answer pair (30): What does it mean? Is it affirmative or negative?

\[(30) \text{— Is Mary not coming?} \]
\[\text{— } \text{Yes.} \]

Now consider the well-formed alternative Yes she is as an answer to (30). This answer is unambiguously affirmative, meaning that Mary is
coming. The question, as before, has the structure (28), repeated here in (31). But now the answer does not copy the whole TP of the question but just the verb phrase coming. The answer, therefore, does not contain a negation, but can have an unspecified polarity feature, which is assigned positive value by the yes-particle.

(31)  

a. Is $^{\text{TP}} \text{Mary} \not<_{-\text{Pol}} \text{is}^{\text{VP}} \text{coming} \]$  

b. Yes $^{+\text{Pol}} \text{she}^{\pm\text{Pol}} \text{is}^{\text{VP}} \text{coming} \]$  

$\rightarrow$ Yes $^{+\text{Pol}} \text{she}^{+\text{Pol}} \text{is}^{\text{VP}} \text{coming} \]$  

Because only the verb/VP is copied, only the verb/VP can be deleted, hence the pronunciation Yes she is.

This explains the judgment in (30). Note that it also vindicates the claim that one-word answers like yes and no have syntactic structure. By this assumption we can explain why, in certain cases, a one-word answer yes is ill-formed and not fully interpretable, while a longer answer such as yes she is is well-formed.

But what do we now say about those speakers, or those situations, where you can answer a negative question with Yes, and the meaning is the one that Kramer and Rawlins talk about: The answer confirms the truth of the negative proposition (‘Yes, she is not coming’)? In the following I will argue that this variation in what yes can mean is due to the fact that there are two negations not in English.

3. THE TWO NEGATIONS NOT AND THEIR EFFECT ON ANSWERS TO YES/NO-QUESTIONS

Consider the following observation (discussed in Holmberg 2013): If the question has an adverb preceding the negation, answering yes unambiguously confirms the negation.

(32)  

— Does John sometimes not show up for work?  

a.— Yes. ( = ‘John sometimes does not show up for work.’)
b. — ?No. (= ‘John does not sometimes not show up for work.’)

The affirmative answer is well-formed in any context and (as far as I know) for any speaker, unambiguously meaning ‘John sometimes does not show up for work’, that is confirming the negation of the question. The bare negative answer is somewhat hard to process, but the reading it has, after a moment’s reflection, is contradiction of the negation, i.e. ‘John does not sometimes not show up for work,’ that is to say ‘He always shows up for work’. It takes some additional processing effort presumably because of the double negation interacting with the adverb.

What this means is that with inclusion of the adverb the negative neutralization effect disappears: yes is now well-formed for all speakers, unambiguously confirming the negation of the question, while no contradicts the negation of the question. The following are two more examples.

(33) — Did he once more not return the books on time?
   a. — Yes.
   b. — ?No.

(34) — Did you purposely not dress up for this occasion?
   a. — Yes.
   b. — ?No.

In both of them the affirmative answer unambiguously confirms the negation: ‘Yes, once more he didn’t return the books’, and ‘Yes, I purposely didn’t dress up.’ The negative answer is again somewhat hard to process, but not impossible. The reading in (33) is ‘No, he did not once more not return the books on time,’ i.e. ‘He returned them on time, this time’. The reading in (34) is ‘No, I did not purposely not dress up.’ In this case the preferred reading is that the negative answer negates the manner adverb: ‘No, it wasn’t on purpose that I didn’t dress up (I just wasn’t aware of the dress code).’ Crucially, in all these cases the negative neutralization effect disappears: yes and no have distinct, antonymous readings.
Part of the explanation for this is to do with the fact that English has two negations not: A higher not, which alternates with n’t and negates the whole sentence (it determines the polarity of the sentence), and a lower not, which is an adjunct to VP, and negates only that constituent. The two negations can co-occur in the same sentence:

(35) a. You can’t not go to church and call yourself a good Christian.  
    b. You mustn’t ever not address him as ‘Sir’.

In this case the higher negation is n’t, but it can also be not, meaning that there can be two distinct negations both pronounced not in the same sentence. (35) and (36) are thus cases of true double negation.

(36) a. You cannot not go to church and call yourself a good Christian.  
    b. You must not ever not address him as ‘Sir’.

Having a low negation scoping over VP only, and thus having room for two distinct negations in the same simple sentence is a fairly unusual property; for example the other Germanic languages, the closest relatives of English, do not have this option.

The structure of, for example, (35b) is then, very roughly, (37):

(37) [TP You must not ever [VP not address him as ‘Sir’]]

The effect of inserting an adverb like sometimes or purposely before the negation in the negative question, as in (32), repeated here as (38a), is then to force the ‘low negation reading’ of not. We know this, because adverbs like sometimes and purposely are themselves ‘low’ adverbs situated at the edge of VP, therefore the negation following sometimes or on purpose must be internal to VP. This means that the polarity feature of the sentence, which is a yes/no-question, can be [±Pol]. The structure is then, roughly, (38b).

(38) a. Sometimes you must not go to church and call yourself a good Christian.  
    b. Purposely you must not ever address him as ‘Sir’.

8 It is part of the explanation because there are certain complications which I skirt in this paper; see Holmberg (2013) for a more detailed discussion. Note that it is actually more correct to say that English has three structurally distinct negations: The two negations pronounced not, discussed in the text, and the negation n’t, which is semantically equivalent to the higher not (discussed in the text), but not syntactically, since n’t unlike not is a clitic, which follows the auxiliary under movement in yes/no-questions, for example.

Anders Holmberg
(38)  a. Does John sometimes not show up for work?
    b. Does \([_{\text{TP}} \text{John} \ [\pm \text{Pol}] \ [_{\text{vp}} \text{sometimes not show up for work}]]\]

The answer particle yes will now assign affirmative value to the unspecified polarity feature.

(39)  yes \([+_\text{Pol}] \ [_{\text{TP}} \text{John} \ [+\text{Pol}] \ [_{\text{vp}} \text{sometimes not show up for work}]]\]

As the answer and the question have identical TPs, the TP of the answer is normally not pronounced, so the answer is just Yes, but the meaning is (or can be paraphrased as) ‘Yes, John does sometimes not show up for work’.

This provides an explanation for the variation regarding yes-answers to negative questions with not, i.e. why some people regard (40) as a fine question-answer pair, where the meaning of the answer is ‘Yes, Mary is not coming’, while other people find it not well-formed.

(40)  — Is Mary not coming?
    — Yes.

It depends on the choice of not. If the not in the question is taken to be the low, VP-internal not, the answer yes is fine. The structure is essentially as in (39b), with no feature clash. If the not in the question is taken to be the higher not, the one which determines the polarity of the whole sentence, the result is a feature clash, the [+Pol] of yes clashing with the [-Pol] feature of the high negation.

The (dis)preference for the low reading of not, in the absence of any adverbs forcing one or the other reading, could be a matter of real dialectal variation. Ruth Kramer and Kyle Rawlins and their informants are speakers of American English while my informants are British. There could also be an element of idiolectal variation. But it could also be that it is more a matter of context, with some contexts favouring low not.

It seems, for example, that stressing the negation in the question makes the yes-answer more natural, which in my terms means that it favours

---

My British English data are in part from an investigation which a group of students in my advanced syntax course at Newcastle University undertook in the spring of 2011.
the choice of low not.\textsuperscript{10}

(41) — Is Mary NOT coming?
— Yes. (= ‘She is not coming.’)

The negative neutralization effect observed by Kramer and Rawlins can also now be explained: It is a matter of choice of not in the question: The affirmative and the negative answer to a negative question with not can mean the same thing as long as the low reading of not is selected for the affirmative answer (which then affirms the truth of the low reading of not), but the high reading of not for the negative answer (which then agrees with the high reading of not, by virtue of the polarity-based system). Thus, as long as the structure of the TP of the question (and hence in the answer) is as shown in (42), the answers will come out meaning the same thing.

(42) — Is Mary not coming?
— Yes. (Structure of question: Is \([_{\text{TP}}\text{Mary} [\pm \text{Pol}] <\text{is}> [_{\text{VP}}\text{not coming}]])
— No. (Structure of question: Is \([_{\text{TP}}\text{Mary not} <\text{is}> [_{\text{VP}}\text{coming}]])\textsuperscript{11}

The prediction is that wherever the low reading of not is forced, by inserting an adverb in the question, negative neutralization will disappear. We can test this on the two other cases of negative neutralization observed by Kramer & Rawlins. Consider first the case of maybe. (43) is a case in point: the affirmative and the negative answer can mean the same thing, namely that John didn’t show up for work.

(43) — Did John not show up for work?
a. — Maybe (so). (= Maybe he didn’t show up.)
b. — Maybe not. (= Maybe he didn’t show up.)

Now let’s insert an adverb preceding the negation.

\textsuperscript{10} This was one of the facts discovered by the students in the investigation mentioned in the previous footnote.

\textsuperscript{11} There are some complications here regarding the syntax of negative questions with the high reading of the negation which I gloss over; see Holmberg (forthcoming) for a more detailed account.
Insofar as the (b) reply can be interpreted, it means that John maybe does not sometimes (or ever) not show up for work, i.e. maybe he always shows up for work. That is to say, my prediction is right: The two answers do not have the same meaning. The reason is that we have forced the same choice of \textit{not} in both cases.

Now consider the case of \textit{if not}, observed by Kramer & Rawlins to exhibit negative neutralization. Consider (45).

(45) — Did you not dress up for this occasion?

a. — If so, have I hurt somebody’s feelings? (= If I didn’t dress up, ...)

b. — If not, have I hurt somebody’s feelings? (= If I didn’t dress up, ...)

The answers can have the same meaning. Now insert an adverb:

(46) — Did you purposely not dress up for this occasion?

a. — If so, have I hurt somebody’s feelings? (= If I have purposely not dressed up,...)

b. — If not, have I hurt somebody’s feelings? (=If I didn’t purposely not dress up,...)

Now the answers do not have the same meaning. The affirmative (a)-answer means ‘If I have purposely not dressed up, have I hurt somebody’s feeling?’ , while the negative (b)-answer (though again somewhat hard to interpret) means ‘If I didn’t purposely not dress up, have I hurt somebody’s feelings?’, or in other words ‘If it was by an oversight that I didn’t dress up, ...’. The reason why the negative neutralization effect disappears is that insertion of the adverb forces the same reading of the
negation in the two cases, in which case the affirmative and the negative answers, not surprisingly, have opposite meanings.\textsuperscript{12}

I conclude that the hypothesis that negative neutralization is an effect of the structural ambiguity of the negation \textit{not} is confirmed.

4. CONCLUSION

I began by noting that there are two systems for answering negative questions, the polarity-based system and the truth-based system. Under the former system an affirmative answer (a \textit{yes}-answer) to a negative question contradicts the negation of the question (with some complications which I discuss) while the negative answer confirms the negation of the question. In the truth-based system, on the other hand, an affirmative answer to the negative question confirms the negation, while the negative answer contradicts the negation. I also noted that there is some variation regarding exactly how these systems are deployed, and that there are languages which, on the face of it, exhibit a mix of the two systems. I then discussed specifically the case of English, which, as discussed by Kramer & Rawlins (2010, 2011), exhibits a kind of mixed system: An affirmative answer \textit{yes} to a negative question employing the negation \textit{not} (as opposed to the contracted form \textit{n’t}) can convey confirmation of the negation of the question (‘Yes, she is not coming’),

\textsuperscript{12}I mentioned the fact that having two distinct negations in the same simple sentence is not possible in the Scandinavian languages, close relatives of English though they are. As predicted, they also don’t exhibit the negative neutralization effect (I can say this with confidence with regard to Swedish; I will need to verify that it holds for the other Scandinavian languages as well). I will give only one example.

(i) — Talar han inte engelska? [Swedish]
    speaks he not English
    ‘Doesn’t he/does he not speak English?’
— ??Troligen.
    probably
— Troligen inte.
    probably not

As also predicted, it is the ‘affirmative version’ which is absent; this is the reading relying on the ‘low negation’, which is what Swedish doesn’t have.
at least for some native speakers of English. Since all speakers of English agree that a negative answer to a negative question can confirm the negation (‘No, she is not coming’), yes and no come out meaning the same thing, for the said category of speakers of English, in this context.

I then show (following Holmberg 2013) that this ambiguity or indeterminacy in the meaning of yes is a consequence of the fact that English has two negations not (in addition to n’t): A higher not which has sentential scope and a lower not which has VP-scope. The choice of yes or no as answers to a not-question will then depend on which variety of not the question employs (or is taken to employ). This account of the meaning and use of answers to yes/no-questions crucially presupposes that these expressions, even when they consist of just one pronounced word, are complete sentences with complete sentential structure, but typically subject to deletion of all or part of the sentential material that they share with the question.

REFERENCES


Holmberg, A. 2013. The syntax of answers to polar questions in English and Swedish. Lingua 128, 31-50.


Annual Meeting of the North East Linguistic Society. GLSA, University of Massachusetts.


Professor Anders Holmberg was born and raised in Finland. He received his PhD from the University of Stockholm in 1987. He has held positions in Sweden, Norway, and the UK. Since 2004 he is Professor of Theoretical Linguistics at Newcastle University, UK, and presently also Director of Research at University of Cambridge. His main research interests are within syntactic theory.

Anders Holmberg

School of English Literature, Language, and Linguistics
Newcastle University
Newcastle upon Tyne, NE1 7RU
UK
anders.holmberg@newcastle.ac.uk