On the syntax of yes and no in English

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1. Introduction[1]

The thesis I will argue for in this paper is that answers to yes/no-questions (YNQs) in the languages of the world are elliptical expressions with basically the structure (1), where IP is identical to the LF of the IP of the question, containing a polarity variable with two possible values, affirmative or negative, which is assigned a value by the focused polarity expression.

(1) yes Foc [$_{IP}$ ...x...]

This is a special case of answers to questions in general. They all have the structure (1), but where, in the case of wh-questions or alternative questions the focused constituent is an NP or PP or AP, etc. In (1) the focused affirmative constituent is a particle; the structure is basically the same in affirmative replies in languages where YNQs are answered affirmatively by echoing the finite verb of the question (Martins 1995, Jones 1999, Holmberg 2001). In that case the verb is a carrier of affirmative polarity moved to specFocP.

I will discuss two versions of this basic idea, one proposed by Kramer & Rawlins (2009,2010), discussing English, one by Holmberg (2007), discussing English, Finnish, and some other languages. I will argue in favour of the latter one. The paper will focus on a particularly vexing case of answers to negative questions in English: the ambiguity of *yes* as an answer to certain negative questions. I will also present an argument that affirmative declaratives have an affirmative polarity head, a counterpart of the negative polarity head of negative declaratives.

2. Three parameters concerning answers to YNQs

There are basically three parameters distinguishing among languages as regards affirmative answers to YNQs. One is whether they employ a particle such as *yes* in English or whether the answer echoes the finite verb or auxiliary of the question (or sometimes other constituents).

(2) Q: Juoko se kahvia? [Finnish]
drinks-Q he coffee
'Do they drink coffee?'
A: Juo.
drinks
'Yes.'

The two other ones concern negative questions. The first is how to confirm the negation of the question. There are basically two systems, the polarity-based system, typical of English, Finnish,

[1] Thanks to the students on *Topics in the Syntax of English* in the spring of 2011 at Newcastle University, especially Nadil Bourkadi, Amy Brown, Thomas Castling, Rosanna Choi, Finlay Davidson, Elizabeth Ekers, Katherine Harmer, Ashleigh Hetherington, Ross Lowery, Manami Matsouda, Sophie Meekings, Tom Sheppey, and Talya Ventura Lawrence, who wrote a paper on yes and no. Thanks also to William van der Wurff and Patrick Chi-Wai Lee.

French and Swedish, among other languages, and the truth-based system, typical of Chinese, Japanese, Russian, among other languages (Jones 1999: 8ff.).

(3) Q: Dricker dom inte kaffe? [Swedish]
drink they not coffee
'Don't they drink coffee?'
A: Nej.
no ['They don't drink coffee.']

(4) Q: keoi-dei m jam gaafe? [Cantonese][2]
he/she-PL not drink coffee
Do they not drink coffee?"
A: hai.
yes ['They don't drink coffee.']

In Swedish the answer particle agrees, as it were, with the negation of the question. This is the polarity-based system. In Cantonese, the answer particle affirms the truth of the negation in the question: 'Yes,(it is the case that) they don't drink coffee'.

The other parameter concerns how to contradict/deny the negation of a negative question.

(5) Q: Eikö se juo kahvia? [Finnish]
not-Q he drinks coffee
'Doesn't he drink coffee?'
A: a. ??Juo.
drinks
b. Juo se.
drinks he
'Yes he does.'

(6) Q: Il n'aime pas du café? [French]
he NEG-likes NEG coffee
'Doesn't he drink coffee?'
A: a. *Oui.
b. Si.
'Yes he does.'

(7) Q: keoi-dei m jam gaafe? [Cantonese]
'Do they not drink coffee?'
A: m hai[3]
not yes
'Yes they do.'

Finnish and French both follow the polarity-based system, but for reasons to be discussed below, the bare verb (in Finnish) and the usual affirmation *oui* are not felicitous answers in either case. Finnish employs VP-ellipsis (see Holmberg 2001 for arguments that the (b)-reply in (5) is derived by VP-

[2] Thanks to Patrick Chi-Wai Lee for data and discussion.
[3] The word *hai* is, or doubles as, the copula 'be'. Arguably the answer in (7) could be glossed as 'not is'.

ellipsis), while French employs a special affirmative particle. Like Finnish are English and Chinese (see Holmberg 2007), like French are German and Arabic. Cantonese, following the truth-based system, has a negative answer to contradict the negation in the question ('It is not the case that they don't drink coffee').

3. Kramer & Rawlins: a theory of answer particles in English

Kramer & Rawlins (2009, 2010), henceforth K&R,[4] take as their starting point an observation about English: Answers to negative YNQs with 'outer negation', that is *n't* cliticized to a moved auxiliary, are, according to them, well-behaved, and look just like answers to neutral questions.

(8) Q: Isn't he coming?
A: a. Yes.
b. No .

Answer to YNQs with 'inner negation', as in (9), are different: The answer *yes* confirms the negation of the question, same as the answer *no*.

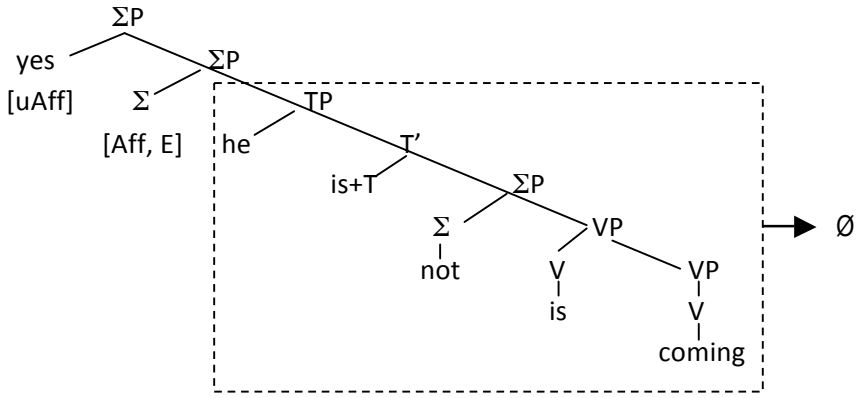
(9) Q: Is he not coming?
A: a. Yes. ['He is not coming.']
b. No. ['He is not coming.']

They refer to this as *negative neutralization*, as *yes* and *no* appear to mean the same thing (the accuracy of the observation will be discussed below). The analysis they propose is the following: First, the answers are derived by TP-ellipsis conditioned by identity with the TP of the question. They are not completely explicit as regards the detailed syntax of the question, but it is implied that it is roughly (10):

(10) is+C [$_{TP}$ he is+T [$_{\Sigma}$ not] [$_{VP}$ is coming]]]

The answer has the structure (11):

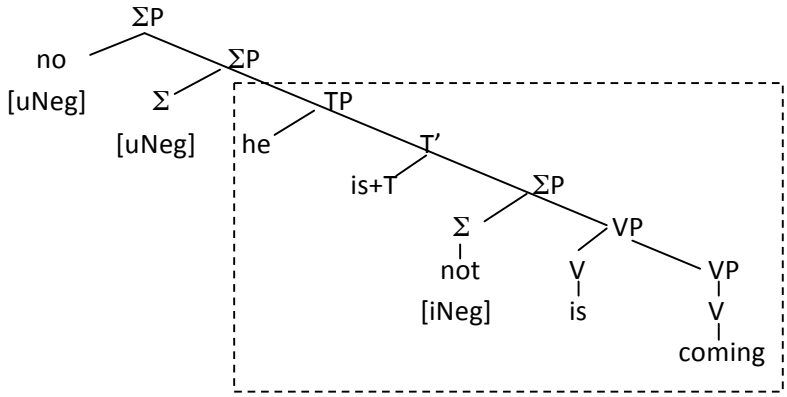
(11)



[4] Kramer & Rawlins (2009) is a fairly short paper, while Kramer & Rawlins (2010) is a fairly detailed handout with wider coverage than the paper and a slightly more refined version of the theory. Except where indicated otherwise I treat them here as a unit.

Σ is a polarity head, first discussed by Laka (1994). The higher Σ in (11) is affirmative. K&R are not entirely clear regarding the features of *yes* and Σ, but I think the preferable analysis, from their point of view, is that high Σ in (11) is interpretable affirmative, while *yes* is uninterpretable affirmative [uAff].[5] The feature [E] is Merchant's (2001) ellipsis-feature, which causes its complement (the boxed portion of the tree) to be deleted, i.e. spelled out as null in PF. I will henceforth omit this feature and the symbol '→ Ø' from the trees. The meaning of (11) is then roughly 'affirmation that he is not coming'. This looks similar to what we see in the Cantonese example (4). However, English does not represent the truth-based system, since the negative particle answer (9b) also means that he is not coming. K&R's analysis is (12):

(12)



Since the question contains a negation, the elided TP of the answer does, too. The relation between the negative particle, high Σ and low Σ is, according to K&R, a case of negative concord. The interpretable negation is the one inside TP, the ellipsis site. High Σ and the negative particle each have an uninterpretable negative feature. The result is a negative concord chain.

How do they propose to deal with the case of a non-negative question?

(13) Q: Is he coming?
A: a. Yes.
b. No.

The case of (13a) is straightforward:[6]

[5] K&R (2009) fn. 8 say "on our proposal positive Σs are unmarked, and effectively featureless". A featureless category is a contradiction in terms, though, so this analysis cannot be maintained. As discussed in the text below, K&R assume that the negative answer particle *no* is 'uninterpretable negative', [uNeg], and enters an Agree-relation with high Σ and sometimes low Σ, either of which can be interpretable or uninterpretable negative. Consistency would seem to favour extending the same analysis to the affirmative particle. K&R assign *yes* and *no* the categorial label Adverb and present an argument in favour of this, namely the fact that they can co-occur, in either order, with speech act adverbs like frankly: *Frankly no./ No, frankly*. I omit this label for ease of exposition.

[6] K&R do not explicitly represent affirmation as a feature; see the previous footnote.

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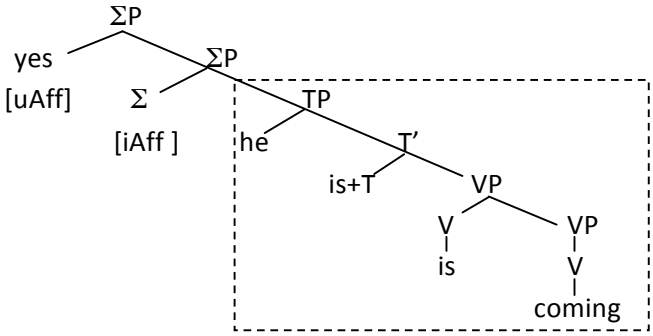

The case of (13b) is less so:

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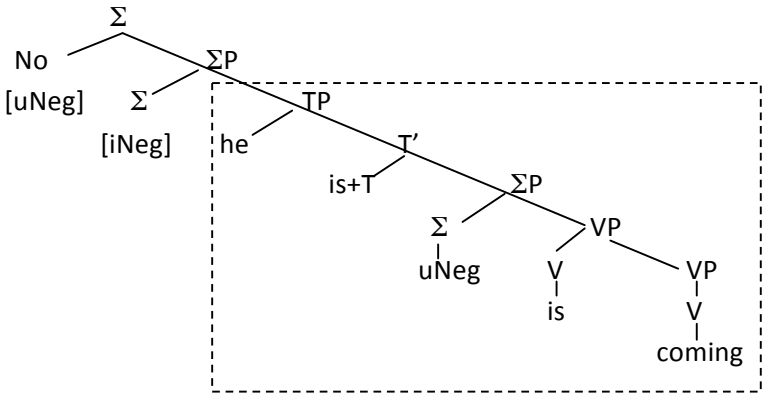


Here the ellipsis site includes an uninterpretable negative feature which does not figure in the question (presumably). So the claim must be that the Σ-feature does not count for the identity condition as long as it is uninterpretable.[7]

In negative questions with outer negation (i.e. with *n't* instead of *not*) the negation is "interpreted high", that is outside the TP. I presume this means that the copy of the negation within TP is [uNeg] while the copy outside is [iNeg]. Therefore the answers work as they do in the case of non-negative questions, under K&R's theory.

(16) Q: Isn't he coming?
isn't+C [$_{TP}$ he <isn't> [$_{VP}$ <is> coming]]
A: a. Yes. ('He is coming.')
b. No. ('He is not coming'.)

4. On negative questions with not

Concerning the answer (9a) to questions with inner negation (*yes* meaning 'he isn't coming'), Kramer & Rawlins (2010) mention that "there is some variation in how acceptable this response is among English speakers". In connection with a taught, advanced syntax module in the spring of 2011 at Newcastle University several students did systematic, questionnaire-based investigations of

[7] It is not entirely clear why K&R need to assume any Σ-feature at all in TP in this case (given that they don't explicitly assume an affirmative-valued Σ in affirmative answers). If TP is pronounced, it will be pronounced with a negation: *No, he is not coming*. But that could be a different case from just *No*; it could be the case when TP contains an interpretable negation and precisely therefore must be pronounced.

interpretations of answers to negative questions with inner and outer negation. A task format that several students used was questions such as

(17) Imagine that you ask somebody the question
Is John not going to the party?
and the person answers: *Yes*.
Would you take the answer to mean (a) or (b)?
(a) John is not going to the party.
(b) John is going to the party.

Few informants took the the answer to mean (a). Typically they deemed it to mean (b), or, in those investigations where the question format allowed it, some informants deemed the answer not to be felicitous with either interpretation, preferring answers such as *Yes he is* to convey unambiguous denial of the negation of the question. A number of other observations were made in these investigations. One was that the intonation of the question made a difference: Stressing the negation in the question was conducive to interpreting *yes* to be a confirmation of the negation.

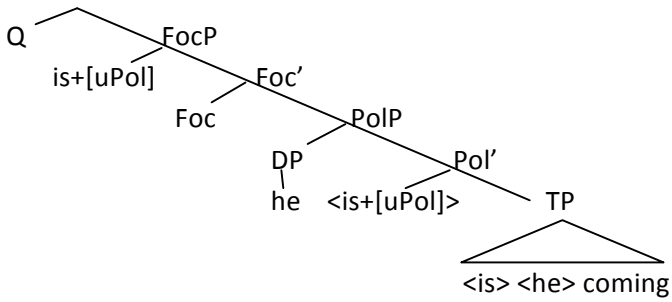
(18) Q: Is he NOT coming?
A: Yes. [Preferred reading for several speakers: 'He is not coming.']

How can we make sense of the variation in answers to negative questions, particularly with inner negation? At this point I will introduce a partly different theory of answers to YNQs, articulating a theory sketched in Holmberg (2007).

5. Valueing polarity

I assume sentence-internal Σ, which I will call Pol(arity), has three values: affirmative, negative, and open, that is neither affirmative nor negative. Open polarity is what open YNQs have.

(19) a. Is he coming?
b.

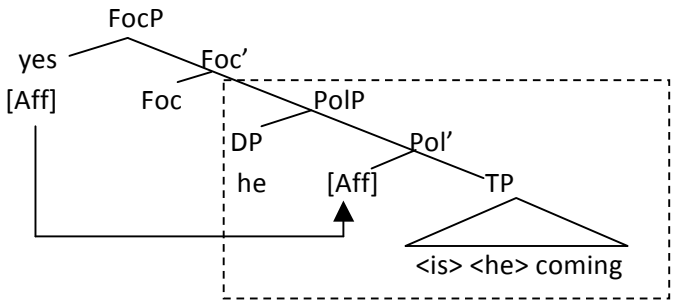


The open polarity feature in PolP (the highest projection in the IP-domain) is probed and attracted by Foc, and undergoes movement ('T-to-C', now redefined as Pol-to-C) which is essentially wh-movement of open polarity (cf. Holmberg 2003). Open polarity is a variable restricted to two possible values, affirmative or negative. Q in (19b) is an illocutionary force feature, meaning 'Tell me the value of the focused variable (i.e. [uPol] in this case), such that the proposition P is true'. The claim is that all questions have essentially this structure: A variable (a wh-phrase or a variable Pol) is

probed by Foc and moved, overtly or covertly, to the CP-domain. In direct questions it is combined with an illocutionary force feature telling the addressee to provide a value for the variable.[8]

The affirmative answer has the structure (20):

(20)



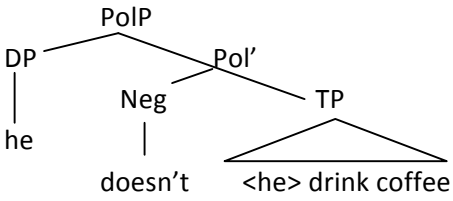
The affirmative particle, focused by virtue of being merged with the FocP, is an operator assigning affirmative value to the sentence-internal unvalued polarity feature, in LF. The PolP is deleted/elided, i.e. is spelled out as null in PF, possible because of the identity with the PolP of the preceding question. The negative answer has the same structure, where the negative particle *no* assigns negative value to the sentence-internal polarity feature.

Before considering answers to negative questions, consider contradicting the negation of a statement.

(21) He doesn't drink coffee.
  a. #Yes.
  b. Yes he does.

Yes and *no*, as well as being answers to YNQs, are commonly used as responses to declaratives, indicating agreement or disagreement. Clearly, responding just *Yes* is not felicitous in the context of (21). The preferred alternative is (b). This follows from the analysis where *yes* and *no* are derived by ellipsis. The statement has the structure (22).

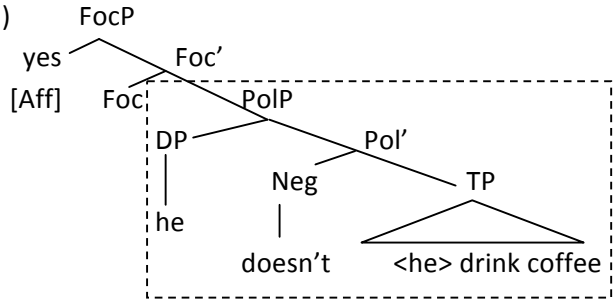
(22)



The answer *yes* must have the structure (23), for the PolP to be elided. But this structure has an affirmative focused operator which has no variable to bind, since polarity is already valued negative.

[8] It is not crucial for the discussion to follow that the head triggering movement in questions is 'ordinary' Foc, rather than a dedicated question-focus head, say, a dedicated polarity-focusing head such as Laka's (1994) Σ, in the case of YNQs. See Miyagawa (2010), though, for arguments that wh-movement is triggered by (ordinary) Foc.

(23)



The well-formed alternative is a sentence where just the TP (or VP) is elided, under identity with the TP/VP of the preceding statement, and polarity is merged unvalued, being valued by the affirmative operator.

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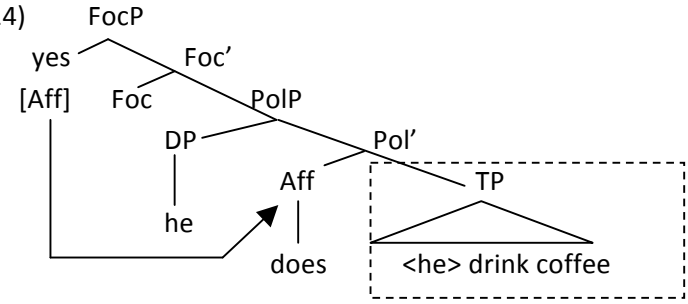

Now consider answers to negative questions which contradict the negation of the question. Consider first the case of outer negation, in K&R's sense. A fact which I will not discuss in this paper is that the form of the answer depends to some extent on the presupposition, or bias, of the question (cf. Ladd 1981). Instead, to simplify the presentation I will focus on the case where the question is biased towards a negative answer. Take the following question to be uttered when the speaker notices, and is surprised by the fact that John is not included among a group of visitors who have just arrived.[9]

(25) Q. Isn't John coming?
A. a. #Yes.
b. Yes he is.

The short answer is infelicitous for the same reason as in (21): Given the structure of the question, (26), the affirmative operator *Yes* has no variable to bind in the elliptical answer (27)

[9] Another observation made in some of the investigations by the Newcastle students was that a viable alternative to *Yes he is* as a reply in (25) is *Yeah*! uttered with emphatic intonation. This expression thus seems to be a colloquial English counterpart to French *si* (exemplified in (6)) and other such affirmative particles which contradict the negation of a negative question. Interestingly, the opposition between *yeah* and *yes* (or their ancestors) has been employed in a similar fashion in older varieties of English, as discussed by Wallage & van der Wurff (2011).

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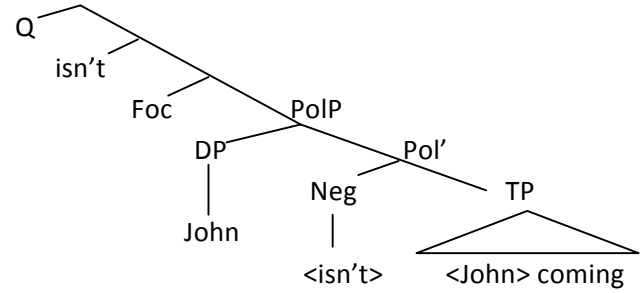

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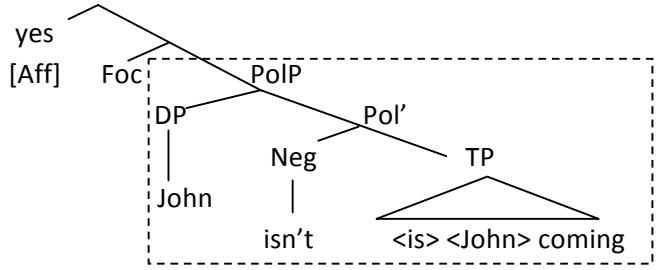

The longer answer has an unvalued polarity feature bound by the affirmative operator. Only the VP is identical to that of the question.

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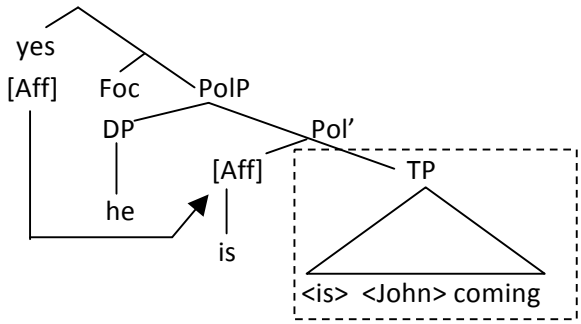

The same explanation can be extended to answers to negative questions with inner negation, now considering the variety of English or the contexts where plain *Yes* does not confirm the negation (as in K&R), but instead is an infelicitous denial of the negation.

(29) Q: Is John not coming?
A: a. #Yes.
b. Yes he is.

The ellipsis of PolP in the short answer presupposes that the PolP of the answer is identical to that of the question. The PolP of the question is valued negative, so the affirmative operator in the answer has no variable to bind. The problem is avoided if what is elided in the answer is just the VP/TP.

6. The two negations *not*

So how come there is variation with regard to answering *yes* to a question with inner negation, such that the answer can sometimes, or for some speakers, confirm the negation ('Yes, he is not coming.'), while in other contexts, or for other speakers, it is a failed disconfirmation of the negation

of the question ? How come stressing the inner negation in the question supports or induces the negation-confirming interpretation?

Consider the following observation: If the question has an adverb preceding the negation, answering *yes* unambiguously confirms the negation.

(30) Q: Does John sometimes not show up for work?
A: a. Yes.
b. ??No.

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 '. The bare negative answer, on the other hand, is distinctly hard to interpret. The following are two more examples.

(31) Q: Did he once more not return the books on time?
A: a. Yes.
b. ??No.

(32) Q: Did you purposely not dress up for this occasion.
A: 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, on the other hand, is again almost unacceptable.[10]

I propose that this has to do with the fact that English has two negations *not*: A higher *not*, which alternates with *n't* and has sentential scope, and a lower *not*, which is an adjunct to vP/VP, and negates that constituent. The two negations can co-occur in the same sentence:

(33) a. You can't/cannot not go to church and call yourself a good Christian.
b. You mustn't/must not ever not address him as 'Sir'.

The effect of inserting the adverbs in the questions (30-32) is that of inducing (or forcing) the lower negation reading. The structure of the question (30), for example, is then basically (34):

[10] The effect is clearest with adverbs low on the Cinque hierarchy (Cinque 1999), which is expected given the discussion below in the text. It is less pronounced in the following examples, featuring higher (epistemic) adverbs.

(i) Is he really not the right man for the job?
?Yes./?No.

(ii) Did you actually not recognize her?
?Yes./?No.

(iii) Is John definitely not coming?
?Yes/?No.

In my (non-native) judgment *no* is weakly preferable to *yes* at least in (i) and (ii), as confirmation of the negation. The matterneeds proper investigation, though.

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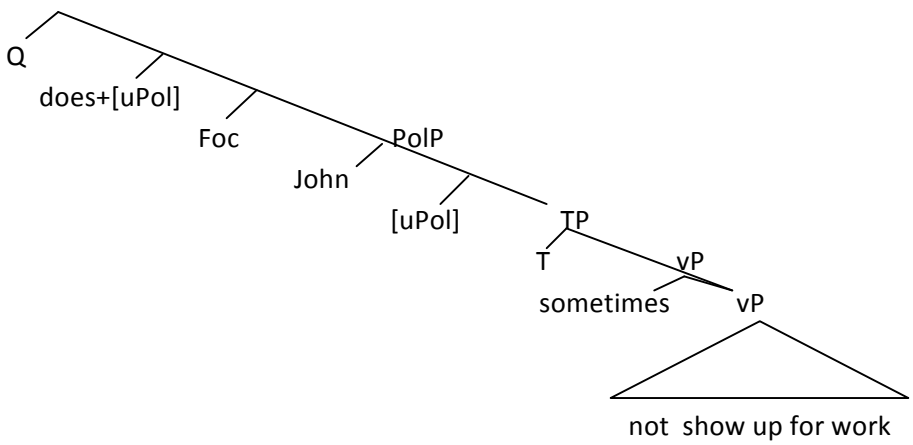
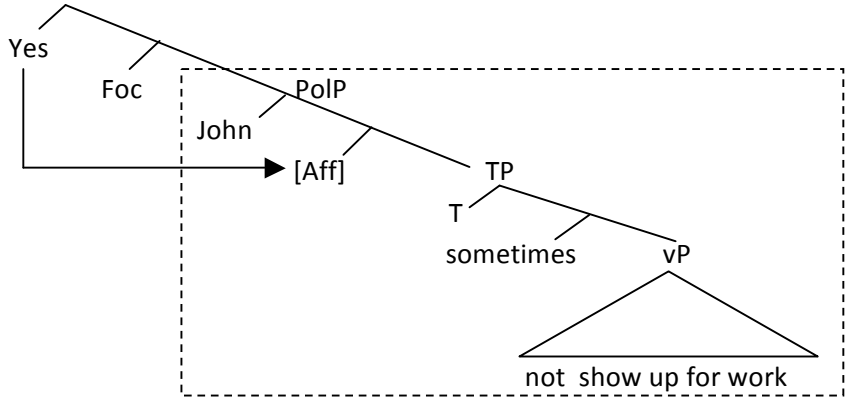


The affirmative answer has an identical PolP, with unvalued Pol, making PolP-ellipsis possible (in PF). The affirmative operator assigns affirmative value to [uPol] (in LF):

(35)



This yields affirmation of the TP containing the low negation, i.e. the reading 'John sometimes does not show up for work'. In the bare negative reply, *No* assigns negative polarity to [uPol]. The resulting reading is, or should be, 'John does not sometimes/ever not show up for work', i.e. 'He always shows up for work'. Insofar as one can interpret the negative answer in (30), this seems to be the reading it has.[11] The same analysis applies to (31) and (32).

A question with inner negation is, then, potentially ambiguous between a high negation and a low negation meaning.

[11] It is not obvious why the bare negation yields a barely acceptable/interpretable answer, although the parsing problem caused by the double negation is presumably at least part of the explanation. Clearly, if the answer to be communicated in the case of (30) is that John always shows up for work, then the natural answer is indeed *No*, but followed by a specification *he always shows up for work*. This is consistent with the valuation-plus-ellipsis hypothesis in the text, but not an argument, since arguably there is no ellipsis involved in that case, and the continuation provides the meaning of the expression.

A question which I choose to gloss over here is the precise analysis of high *not*. It has the same scope as *n't* (in declaratives) but not the same syntactic position. Following Holmberg (2003) I assume *n't* is the highest head in IP, but high *not* is not, since it is preceded by an auxiliary or moved verb (*He is not coming*.) I assume it is located between T and vP.

(36) Q: Is John not coming?
A: Yes.

This accounts for the ambiguity of the affirmative answer: Either it is a failed or incomplete contradiction of the high negation in the question (failed because the affirmative operator requires unvalued Pol but encounters a negatively valued Pol), or it is a confirmation of the low negation. Stress on *not* may have the effect of inducing the low reading of *not*, which would explain why the affirmative answer is more easily read as confirming the negation in that case.

(37) Q: Is John NOT coming?
A: Yes. [Preferred reading: 'He is not coming.]

It is by no means inconceivable that there could be some real regional variation regarding the interpretation of *not* as either a variant of high negation (i.e. a value of Pol) or as low negation. If so, this may explain the difference between K&R's data, collected in the USA, and my data, collected by British students mainly from other British students. Alternatively there is no difference, when other factors are controlled for, such as intonation.

In that case the negative neutralization that K&R observed is also an effect of the structural ambiguity of *not*. A negative answer to a negative question, with inner or outer negation, is in most contexts interpreted as confirming the negation (the polarity-based system).

(38) Q: Isn't John coming?/Is John not coming?
A: No. ['He is not coming.']

Since *n't* only ever has a high reading, i.e. it is the spell-out of negative Pol, the meaning of the answer here does not rely on low negation. K&R argue that it is an effect of negative concord. The negative operator agrees with negative-valued Pol.

(39) No Foc [$_{PolP}$ John is+[Neg] [$_{VP}$ <is> coming]]
[Neg]

Assuming Chomsky's theory of formal features (Chomsky 1995, 2001), only one of the two negative features can be interpretable/inherently valued. K&R propose that the answer particle *no* is always uninterpretable negative, [uNeg]. More precisely, they assume that high Σ (their counterpart of Foc in (39)) is [uNeg] in negative answers to negative questions, i.e. in cases like (39), in which case low Σ (their counterpart of Pol in (39)) provides the interpretable negative feature of the negative concord chain. On the other hand, in negative answers to non-negative questions, as in (15), high Σ is [iNeg], providing negative value for the particle *no* and for low Σ.

In the present theory, which does not rely on varieties of high Σ (K&R assume interpretable negative, uninterpretable negative and affirmative high Σ), but where the particles themselves provide interpretable negative or affirmative feature values, the corresponding analysis would have two varieties of *no*: One would be inherently valued [Neg], the one at work in negative answers to non-negative questions, as in (20) with *no* instead of *yes*. The other one would be unvalued, being the unvalued member of a negative concord chain; that would be the one at work in negative answers to negative questions, as in (39), where Pol provides the inherently valued negative feature.

In this perspective, a difference between languages with a polarity-based answering system and a truth-based answering system would be that the former have an inherently unvalued negative answer particle.

For no very strong reasons I prefer assuming only one answer particle *no*, inherently valued negative. I have assumed (along with K&R) that the negation in the question, particularly in the case of inner negation, is also inherently valued negative. I do not, therefore, adopt the hypothesis that (38, 39) is a special case of negative concord, as familiar from constructions with negative quantifiers in many languages. Instead, I assume that the answer particle and Pol in (39) are both valued negative, and that their relation is one of 'mutual support', not valuation. When Pol is already valued negative, the role of the negative answer particle is merely signalling the presence of negative-valued Pol.

Summarizing, if my analysis of affirmative answers to negative questions with inner negation is correct, the affirmative answer in (40) (= (9)) requires analyzing *not* as low negation, while the negative answer relies on high negation.

(40) Q: Is John not coming.
A: Yes. ['He is not coming.']
A: No. ['He is not coming.']

The evidence is that the negative neutralization disappears when the low negation reading of *not* is forced by insertion of an adverb, as in (30-32).

7. Other cases of negative neutralization

K&R make the observation that negative neutralization occurs not just with *yes* and *no* but with certain adverbs as well.

(41) Q: Is John not coming?
A: Maybe (so). ['Maybe he isn't.']
A: Maybe not. ['Maybe he isn't.']

Both answers mean that John is maybe not coming. Under K&R's theory, this follows from the ellipsis hypothesis: Ellipsis presupposes that TP (our PolP)in the reply is (interpretable) negative. The variation between *maybe (so)* and *maybe not* is (as far as I understand) a matter of which feature value the abstract high Σ has. Whether affirmative or negative, the proposition 'John is coming' is negative.

The prediction made by the theory articulated here is that, because negative neutralization is an effect of the structural ambiguity of *not*, it will disappear if the high reading of *not* is excluded, by inserting an adverb in the question.

(38) Q: Does John sometimes not show up for work?
A: a. Maybe (so). ['Maybe John sometimes does not show up for work.']
b. Maybe not. [??]

Insofar as the (b) reply can be interpreted at all it means that John maybe doesn't sometimes (or ever) not show up for work, i.e. maybe he always shows up for work. That is to say, our prediction is right.

K&R (2010) discuss certain other neutralization effects. In all of these, the neutralization effect disappears when the high reading of *not* is blocked. One of them is the following:

(43) Q: Is John not coming?
A: a. If so, it will be fun. ['If he isn't coming...']
b. If not, it will be fun. ['If he isn't coming...']

Again, blocking the high reading of *not* should allow the (a)-reply but disallow, or change the meaning of, the (b)-reply, which is what we see in (41).

(44) Q: Did you purposely not dress up for this occasion?
A: 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 dress up...']

I conclude that the hypothesis that negative neutralization is an effect of the structural ambiguity of the negation *not* is confirmed.

8. A piece of evidence of affirmative value in declaratives

I have assumed that finite sentences have a head Pol(arity) which has one of three values, affirmative, negative, or open, where open is the value of (open) questions, which is fixed as either negative or affirmative in the reply. While no-one will deny that negative sentences have a negatively valued element, which may or may not be universally a head (Haegeman 1995), it is much more controversial whether non-negative declarative sentences have a corresponding affirmative element (for example K&R assume that they do not). For one thing, the negative element is typically (or perhaps even always) morphologically expressed as a negative particle or inflection, but there is rarely any overt morphological evidence of an affirmative element (although, as discussed by Laka (1994), when focused, affirmation can be morphologically expressed). Another reason to doubt the existence of an affirmative element in non-negative declaratives is that it does not seem to induce any cross-over or island effects corresponding to the effects that the negation has. If there is an affirmative head in (45a), corresponding to the negative head in (45b), why does it not affect adjunct wh-movement the way the negation does?

(45) a. How did he say that he fixed the sink?
b. *?How didn't he say that he fixed the sink?

The alternative to assuming an affirmative syntactic head (or other constituent with an affirmative feature) is to assume that the affirmative reading is the default reading, in the absence of a negative-marked or question-marked head.

Consider, however, the following observation:

(46) John is coming.

a. Yes.

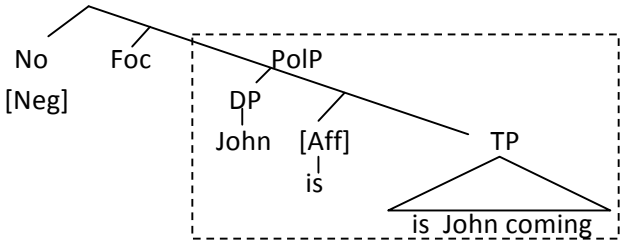
b. #No.

c. No he isn't.

This is a case of *yes* and *no* used as a respons to a declarative (discussed above in the context of (21)). Why is the b-respons not felicitous here? This is explained if the declarative has an affirmative feature, as in (47a). In order for PolP to be elided in the answer, this affirmative feature must be present in the PolP of the answer. But if it is, there is a feature clash with the negative feature of the focused negative particle.

(47)a. [$_{PolP}$ John is+[Aff] [$_{TP}$ <is> [$_{VP}$ <John> coming]]]

b.



The counterpart (46a) is fine, because the affirmative particle does not clash with the affirmative feature of Pol (they have a relation of 'mutual support'). The counterpart (46c) is also fine, because in that case only TP is elided, so only TP needs to be identical to that of the preceding declarative. Pol can be merged unvalued, and be valued negative by the focused negative particle.

This is, then, a piece of evidence that affirmation is a syntactic feature, on a par with negation. It is generally not morphologically expressed because the grammar makes use of the option of expressing the opposition between two values as opposition between null and overt. Why affirmation does not induce island effects to the same extent as negation must have some other explanation.

9. Conclusions

K&R have no obvious way to deal with the variation observed with regard to *yes* as an answer to a negative question with inner negation: either confirmation of the negation or a failed or incomplete disconfirmation of the negation. Nor does the theory predict the effect of insertion of an adverb in the question, or stressing the negation, on the interpretation of the answer, including its effect on negative neutralization. These are some empirical reasons to prefer the alternative theory articulated here, developing ideas in Holmberg (2001, 2003, 2007).

A conceptual reason to prefer the present theory is that it has the ambition, in the spirit of Chomsky (2001), to make do with a more restrictive theory of features than the one assumed in K&R: Binary features are valued or unvalued. If and when they are valued, they are valued as positive or negative. In particular, there is a feature [polarity], which has negative or positive value or is unvalued. There is no [uNeg], an 'uninterpretable negative' feature, or a corresponding [uAff] feature. An argument is presented that sentences have a Polarity head which has affirmative value in affirmative declarative sentences, a counterpart to the negative value in negative sentences.

The identity condition on ellipsis is also stricter in the present theory than in K&R, where a relaxation of the identity condition is proposed, to allow identity between two expressions which have different features as long as the features are of the uninterpretable kind; see the discussion of (15). The present theory also has the ambition to make do without an abstract high polarity head which can have any polarity-related feature value without any morphological realization.

Finally, although not discussed in this paper, the theory is designed to also accommodate answers to YNQs in languages and constructions employing echoing of the finite verb of the question instead of an affirmative particle; see Holmberg 2007.

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