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Two negatives in Tyneside English questions: Negative concord or double negation?

Abstract: In this chapter we introduce an unusual negative construction found in Tyneside English (Northeast England) where two sentential negative elements can co-occur in questions: *Did**n't** she **not** go on holiday?*. Our analysis is based on acceptability judgement data comparing the construction to Standard English "inner" and "outer" negation (whereby a negative question can be interpreted as questioning an affirmative proposition or a negative one) and Tyneside English tag questions. We argue that the phenomenon under discussion is negative concord. We provide an analysis following Zeijlstra (2004) and Tubau (2016) in which Tyneside English differs from Standard English in terms of the interpretability of the negative features. We claim that in Tyneside English, both the lower negative element *not* and the higher *n't* can have an uninterpretable [uNEG] feature, causing them to enter into a negative concord relation with a covert negative operator bearing [iNEG], which explains the variation in usage that we find in this variety.

1 Introduction

In this chapter, we describe a negation pattern found in the Tyneside variety of English, spoken in the Northeast of England around the city of Newcastle-Upon-Tyne, in which two allegedly negative elements can co-occur in tag and main clause questions. We show that these cases are instances of negative concord, and extend Tubau's (2016) analysis of vernacular British English varieties that exhibit negative concord with Negative Concord Items (NCIs) in order to account for this pattern with the negative adverb *not* in Tyneside English.

1.1 Two negatives in Tyneside English

The phenomenon under investigation is illustrated in (1), where Tyneside English has tag questions with two negative elements. The construction is rare, as Beal and Corrigan (2005: 153) note, but speakers are aware of it and perceive it as a common feature of their variety.[1]

(1) CB/848: *They're not as big, the rides at the Hoppings, are**n't** they **not**?*
SM/135: *No.*
(The Diachronic Corpus of Tyneside English (DECTE, Corrigan et al. 2010-2012), 2010_SEL2019_007)

The same pattern can be observed in main clause questions. This is also infrequent in speech, hence our illustration in (2) is from a speaker in Doncaster in Yorkshire[2] rather than Tyneside, but again, speakers of Tyneside English accept this as part of their variety.

[1] The authors are both native speakers of Tyneside English and share this intuition.
[2] Instances of the same phenomenon appear in other regions represented in the Spoken BNC-2014 but are rare overall, so it is difficult to judge its spread without a full-scale study of this aspect, which we leave for future work.

(2) S0041: *Was**n't** she **not** with like Frank Butcher or something ridiculous?*
S0084: *She's Frank Butcher's daughter.*
(Speaker from Doncaster, Spoken British National Corpus 2014 (Love et al. 2017))

The questions asked in examples in (1) and (2) appear to permit some ambiguity of interpretation between either negative concord or double negation which is only resolved in context. Negative concord refers to the phenomenon whereby "negation is interpreted just once, though it seems to be expressed more than once" (Giannakidou 2000: 87).[3] Many vernacular varieties of English, including Tyneside English (Childs 2017), allow negative concord in a range of linguistic contexts. However, an alternative interpretation of the same sentence – and an interpretation which is the only permissible meaning within the rules of Standard English – is that such examples are cases of double negation. Under a double negation interpretation, the two negative elements each contribute a negative meaning to the sentence and therefore "cancel" each other out to yield a positive interpretation (Horn 2001: 22).

With regard to the two negative elements in (1) and (2), our first question is whether this is negative concord or double negation, since Tyneside English is a non-standard variety of English that would, in theory, allow for both. Secondly, as the two negative elements occur in questions, the meaning of the potential answers that someone could offer in response to such questions is not clear, due to the well-known ambiguity of answering *yes* to a negative polar question in English. The remainder of this section provides the background to these two issues before we turn to our analysis of the two-negation structures in Tyneside English in section 2, which we probe via an acceptability judgement study.

1.2 Negative concord

In Standard English, if two negatives co-occur, they "cancel out" and are interpreted as contributing a positive meaning, as in (3). This is commonly referred to as "double negation". The context with this example is that the speaker has been accused of doing nothing and, by uttering (3), denies this. Typically, one of the negative elements must be prosodically prominent (Biberauer and Roberts 2011; Blanchette and Nadeu 2018) and, as such, (3) is not felicitous "out-of-the-blue".

(3) *I didn't do nothing! [How dare you! I tidied my room and fed the cat!]*

However, in many non-standard varieties, both in the UK and in other English-speaking countries, two (or more) negatives contribute a single negation meaning, as shown in (4)–(6). Unlike examples of double negation, these negative concord examples would be felicitous "out-of-the-blue" with a neutral intonation contour – the negation scopes over the whole proposition (de Swart 2010: 255).

(4) *That's where we go clubbing when there ain't nothing to do.*
'That's where we go clubbing when there isn't anything to do'.
(Jeff, Reading, England; Cheshire 1982: 63)

(5) *She disna bide in Buckie nae mare.*
'She doesn't live in Buckie any more'.
(Buckie Scots; 495.8:v; Smith 2001: 110)

[3] We note the distinction made by Van Alsenoy & van der Auwera (2014) between negative concord (with negative elements such as *nothing*) and double clausal negation (such as the two instances of *nie* 'not' in Afrikaans), but adopt this more general definition in this chapter as it does not affect our analysis.

(6) *I didn't know nothing about the people, or nothin'.*
'I didn't know anything about the people, or anything'.
(Pauline J., South Carolina, USA; Labov 1972: 806)

Negative concord with NCIs (such as *nothing*, *no one*) of the kind shown in (4)–(6) is also found cross-linguistically. van der Auwera and Van Alsenoy (2016) estimate its occurrence at around 19% of languages based on a sample of 179 languages drawn from six macro-areas, and are cautious to note that this estimate may be high due to the way that NCIs are defined in the literature.

In languages with strict negative concord, it is obligatory for NCIs to occur with a negative marker, as in (7) for Czech and (8) for Hungarian.

(7) Czech

Dnes	*nikido*	**(ne)-volá*	*nikoho.*
Today	n-body	NEG-calls	n-body

'Today nobody calls anybody'.
(Giannakidou and Zeijlstra 2017: 9)

(8) Hungarian

Senki	**(nem)*	*látott*	*semmit.*
n-person	not	saw.3SG	n-thing

'No one saw anything'.
(Giannakidou and Zeijlstra 2017: 9)

In languages with non-strict negative concord, post-verbal NCIs require a pre-verbal negative marker, as shown in (9a) for Spanish. However, NCIs in pre-verbal position cannot appear with a negative marker, as in (9b).

(9) Spanish

a.

**(No)*	*vino*	*nadie.*
NEG	came	n-person

'Nobody came'.

b.

Nadie	*(*no)*	*vino.*
n-person	NEG	came

'Nobody came'.
(Penka 2011: 17)

Additionally, many languages include a second negative element in sentential negation contexts without NCIs, either optionally, as in Tamazight Berber (10) and Hausa (11), or obligatorily, as in Awa Pit (12):

(10) Tamazight Berber

Ur	*ughax*	*(sha)*	*lktaab.*
NEG	1SG.bought	NEG	book

'I didn't buy the book'.
(Zeijlstra 2004: 132)

(11) Hausa

a. *bàn* *san* *sūna-n-sà* *ba.*

NEG.1SG know name-LINK-3SG NEG
'I don't know his name'.
(Kraft and Kraft 1973: 108)

b. *ba* *nà* *zuwà* *dà* *kai.*
NEG CONT come:NOMIN with 2SG
'I am not going with you'.
(Kraft 1963: 134)

(12) Awa Pit
Santos=na *shi* *i-ma-y.*
Santos=TOPIC NEG go-NEG-NONLOCUT
'Santos did not go'.
(Curnow 1997: 334)

To account for the variation found in negative marking cross-linguistically, Zeijlstra (2004) proposes a formal syntactic account of negative concord that relies on Multiple Agree. He argues that variation in negative concord observed within and across languages emerges because of variation in the interpretability (or lack thereof) of formal negative features in the syntax. Under this approach, strict negative concord requires a negative operator in NegP with an interpretable negative feature [iNEG] which c-commands negative markers and NCIs. These negative markers and NCIs have an uninterpretable feature [uNEG] which must form an Agree relation with the negative operator so that the [uNEG] feature can be checked and deleted (Zeijlstra 2004). In cases of non-strict negative concord, the negative marker itself carries [iNEG], as it is "the realisation of the negative operator" (Zeijlstra 2004: 258). The Agree relation between the negative marker and any other negative elements then operates in the same way as for strict negative concord.

English presents an interesting case for Zeijlstra's (2004) theory because the behaviour of NCIs is different between non-standard and standard dialects. NCIs can be used in negative concord in non-standard varieties (13)–(14) but also in Standard English contexts without any sentential negation marked on the verb itself, in cases of so-called "*no*-negation" (Tottie 1991; Childs 2017; Childs et al. 2020) of the kind in (15), or fragment answers as shown in (16).

(13) *I didn't see nothing.*

(14) *Nobody didn't see nothing.*

(15) *I saw nothing.*

(16) *A: What did you see?*
B: Nothing

As Tubau (2016) sets out, if we want to understand the nature of negation in vernacular dialects of English, we must be able to account for the fact that NCIs such as *nothing* can occur with a *not/n't* but not obligatorily so. Herburger (2001) suggests that this may reflect a state of affairs in which NCIs are ambiguous. One of the complexities of an ambiguity account is that it has to make the right predictions about the licensing of NCIs,[4] e.g. negative polarity items in

[4] Tubau (2016), Giannakidou (2000) and other authors use the term 'n-word' (originally Laka 1994). We follow Déprez et al. (2015) in using the term "negative concord item" because the former term has a non-linguistic use that causes offence. It is not intended to signify any different categorisation of these words, and Espinal et al. (2023) claim equivalence of the two terms.

English cannot occur in pre-verbal position (Penka 2011: 43) and NCIs in non-standard varieties of English are restricted to negative clauses (Tubau 2016: 151). Tubau (2016) therefore proposes that NCIs in non-standard varieties of English have two lexical entries. The first consists of a negative operator with [iNEG] that combines with an existential DP which, together, express negation. The second consists of an existential DP with [uNEG] which obligatorily needs to have the uninterpretable feature checked as part of an Agree relation with a higher negative element carrying [iNEG]. This proposal can capture the variable nature of NCIs like *nobody* in non-standard varieties of English.[5]

For Standard English, Tubau (2016) posits that a negative operator contributes semantic negation rather than carrying an [iNEG] feature, i.e., *not/n't* does not carry an [iNEG] feature. NCIs also do not carry [iNEG], but are negative quantifiers. This account is consistent with the fact that two negative elements in a sentence do not need to enter an Agree relation with each other as part of a negative concord construction, given that negative concord is not found in Standard English; the result would instead be double negation with the two negative elements cancelling each other out.

1.3 Inner and outer negation

Also pertinent to the discussion here is the existence of two interpretations of negation in Standard English varieties, whereby a negative question can be interpreted as questioning an affirmative proposition or a negative one. The distinction can be subtle but is illustrated in (17), adapted from Ladd (1981):

(17) Two former left-wing activists are discussing an old friend:
A: *Did you hear that Pip's decided to go to business school?*
B: *Yes, they've changed so much;* ***didn't they even vote Conservative****?*
A: *Yes, that's what I heard.*

(18) Two dyed-in-the-wool right-wing voters are discussing an old friend:
A: *Did you hear that Pip's become very disillusioned with the party lately?*
B: *Oh really?* ***Didn't they even vote Conservative****?*
A: *No, not as far as I know.*

The question in both contexts is the same, but in (17) the questioned proposition is P and seeks confirmation of a belief that Pip did vote Conservative. In (18), the questioned proposition is not-P and seeks confirmation of a new inference, that Pip did *not* vote Conservative. Ladd (1981: 165) ascribes this ambiguity to the negation in (17) being "somehow outside the proposition under question" and in (18) as being "inside the proposition under question, so that what is being questioned is the inference –P".

The negation can thus appear in an inner or an outer position. Romero and Han (2004) and much subsequent work show that a question with high or outer negation requires the speaker to have a bias for the positive answer, while a question with low or inner negation does not. The example in (19) illustrates this:

[5] Tubau et al. (2023) in fact outline a new analysis of negative concord. In Catalan, the negative marker optionally co-occurs with preverbal NCIs, making the clear delineation between strict vs non-strict negative concord difficult to maintain. Their claim is that NCIs have a [neg] feature that must c-command Tense, and that it does so either by the NCI moving or by the [neg] feature alone, which is then spelt out by the negative marker. For the purposes of this chapter we retain the (2016) account, however.

(19) A has been in a windowless office for the last eight hours. It is equally likely that it could be nice out or not. Then B walks in rubbing his hands together and stamping his feet, and says, "I hate the weather in this town!" A replies:

a. *Is it not nice out?*

b. *#Isn't it nice out?*

(Goodhue 2022: 381)

Furthermore, Romero and Han (2004) show that to obtain the reading whereby the negation of P is suggested, an extra negative element is required:

(20) Dialog between two editors of a journal in 1900:

A: *I'd like to send this paper out to a senior reviewer, but I'd prefer somebody new.*

S: *# Hasn't Frege reviewed for us yet? He'd be a good one.*

S': *Hasn't Frege not reviewed for us yet? He'd be a good one.*

(Romero and Han 2004: 619)

The literature has frequently maintained the "inner" and "outer" terminology. However, at least since Kramer and Rawlins (2009), a further ambiguity has been observed with questions with inner negation: for many speakers of English, the distinction between the answer particles *yes* and *no* collapses, as in (21), which they refer to as "negative neutralisation".

(21) Inner negation

A: Is Alfonso not coming to the party?

B: Yes (= he isn't coming)

B': No (= he isn't coming)

(Kramer and Rawlins 2009: 480)

Compare the equivalent positive question in (22) where the *yes*/*no* particles confirm or deny P as expected, and the question with outer negation in (23) which Kramer and Rawlins claim has the same interpretations as the positive question:

(22) A: *Is Alfonso coming to the party?*

B: *Yes* (= he is coming)

B': *No* (= he isn't coming)

(23) Outer negation

A: *Isn't Alfonso coming to the party?*

B: *Yes* (= he is coming)

B': *No* (= he isn't coming)

(Kramer and Rawlins 2009: 484)

The fact that the *yes*/*no* responses to (21) are interpreted as having the same meanings is generally argued to be due to the syntactic position of the negation or the semantic features of the polarity particles (Romero and Han 2004; Kramer and Rawlins 2009; Holmberg 2013; Roelofsen and Farkas 2015; and see Goodhue 2022 for an account that differs from these in its analysis but still considers high negation to be "outside the proposition"). We return later to these analyses and their application to the phenomenon under discussion. Particularly relevant for the present purposes is the general idea that the negation is taken to be either high, scoping

over the entire clause (outer negation), as in (23), or lower in the clause as in (21) (inner negation).

In Standard Englishes, inner and outer negation do not co-occur – or rather, when they do, both instances of negation are interpreted, i.e., there is double negation (Lowth 1762; Tilleson 2019; among many others). However, in many varieties, particularly northern British Englishes, it has been proposed that there is optionality over which negation occurs in sentential negation. This argument is based on the fact that, particularly in certain varieties, the negative neutralisation illustrated above is not as clear: Kramer and Rawlins (2012) found a "minority" who interpreted a *yes* answer to mean P, rather than not-P, and Holmberg (2013) finds this for the majority of respondents in a study of mostly Tyneside English speakers. Specifically, "few informants took the answer [yes, to the question 'Is John not going to the party'] to mean [John is not going to the party]" (Holmberg 2013: 36). The foregoing discussion therefore has implications for our analysis of two-negation questions in Tyneside English.

1.4 Issues arising for Tyneside English

One complication that must be resolved is that for Tyneside English, auxiliary-contraction (24) may be more frequent compared to negation-contraction (25):

(24) Auxiliary-contraction
We've not been there yet.

(25) Negation-contraction
We haven't been there yet.

Trudgill's (1978: 13) suggestion that auxiliary-contraction might be higher "the further north one goes" within England is not necessarily true, as studies have failed to find such a continuum between South and North (Anderwald 2002; Tagliamonte and Smith 2002; Szmrecsanyi 2013). However, there is evidence that Northeast England has a particularly high rate of auxiliary-contraction compared to other regions. For example, Tagliamonte and Smith (2002) compare auxiliary- vs negation-contraction in eight different communities in the UK and found that Wheatley Hill, County Durham – in Northeast England – had the second highest rate of auxiliary-contraction, at 45%, which was beaten only by Cumnock, Scotland (51%). Wheatley Hill had the most auxiliary-contraction of any English community that was studied (Tagliamonte and Smith 2002: 267) – compare Maryport, North West (14%); York, Yorkshire (18%); Henfield, South East (31%); and Tiverton, South West (18%).

This variation between auxiliary- and negation-contraction blurs the distinction between inner and outer negation that was made on the basis of Standard English – as discussed in Section 1.3 – which typically has negation-contraction. In the standard variety, an instance of inner negation is pronounced in its full, uncontracted form (see example (21), *Is Alfonso not coming to the party?*), which differentiates it from the contracted outer negation (see example (23), *Isn't Alfonso coming to the party*?). If Tyneside English often uses auxiliary-contraction, which leaves the negative marker *not* uncontracted, then both inner and outer negation would tend to have *not* in its uncontracted form, with *Did Alfonso not come to the party?* potentially expressing either meaning. As such, the Standard English distinction between inner and outer negation is lost.

Tyneside English also has negative concord with indefinites (Childs 2017). This is illustrated in (26), where *nowt* is a vernacular word for "nothing" and the utterance overall means, in its context, "that doesn't mean anything". Other types of negative concord attested

in Tyneside English include those with NCI subjects + *never* (27) and negated subjects + a negated verb (28).

(26) *Well that doesn't mean nowt*
[PM/85, DECTE, File 2007_SEL2091_009]

(27) *Nothing never went wrong*
[JS/169, DECTE, File 2007_SEL2091_049]

(28) *Not everyone doesn't know*
[BB/929, DECTE, File 2007_SEL2091_004 / decten2y07i001]
(Corrigan et al. 2010–2012)

In light of the above discussion, Tyneside English two-negation questions of the kind in (2) appear to comprise inner and outer negation, in its contracted and uncontracted forms. Our question in this chapter is how this is interpreted. In other words, is this a case of negative concord, or is it interpreted like a Standard English double negative?

Some insight on this question comes from the observation that Tyneside English also has tag questions with two forms of negation (for example, *isn't it not*). McDonald and Beal (1987) provide a discussion of various tags, based on McDonald's (1981) research. Although McDonald and Beal's (1987) paper concerns modal verbs, and their examples contain modals, they nevertheless note that the differences in Tyneside English tag usage compared to Standard British English also involve other auxiliaries. They claim that Tyneside English has higher rates of positive tags with positive anchors than Standard British English, as well as more "syntacticised" tag forms due to purportedly less tonal variation in the dialect compared to Standard British English. As well as canonical tags with contracted negation that contrast in polarity with the positive clause to which they attach (known as the "anchor" clause; see Tottie and Hoffmann 2006), Tyneside English also has contracted negative tags with negative anchors and an uncontracted counterpart for both polarities. Negative-negative tags meanwhile do not occur at all in their comparison corpus representing other varieties of British English. Whether the anchor is positive or negative, McDonald and Beal (1987) argue that the uncontracted negation (e.g., *can she not*) is used when information is sought, while the contracted negation (e.g., *can't she* or *can't she not*) is used for seeking confirmation of a proposition. The *can't she not* form, with the uncontracted second negative form, can be used when it follows a negative anchor, giving the contrast between *can she not* (information-seeking) and *can't she not* (confirmation seeking) (see also Beal 1993).

Tyneside English thus has the tag question types given in (29) with examples:

(29) Tyneside English tag questions
- a. Positive anchor, negative tag, modal+n't+subject
  She can come, can't she?
- b. Positive anchor, negative tag, modal+subject+not
  She can come, can she not?
- c. Positive anchor, positive tag
  She can come, can she?
- d. Negative anchor, positive tag
  She can't come, can she?
- e. Negative anchor, negative tag, modal+subject+not
  She can't come, can she not?
- f. Negative anchor, negative tag, modal+n't+subject+not
  She can't come, can't she not?

(all from or adapted from McDonald and Beal 1987: 53)

The crucial type for our purposes is of course (29f), with both contracted and uncontracted negation. These tags seek confirmation of a negative (McDonald and Beal 1987; Beal 1993; Jamieson under review). McDonald and Beal (1987: 53) argue that "the only proper answer to this […] question is 'No, of course not!'". Similar constructions have been reported for varieties of Scots including in Edinburgh e.g., *she didnae like him, didn't she no?* (Millar and Brown 1979) and Glasgow and Ayshire (in the Scots Syntax Atlas (Smith et al. 2019), as discussed in Jamieson under review). Jamieson (under review) also carried out a judgement task of *-int*-subject-*no*? tags with negative anchors, e.g., *wint you no?* ('won't you not?'), with 20 speakers of Glasgow Scots. Participants found these tags most acceptable when they were confirmatory and related to some shared knowledge between the speaker and hearer, as opposed to when they challenged the proposition in the anchor clause.

A related observation from Tagliamonte and Smith (2002) is that auxiliary+subject+negation forms of interrogatives (e.g., *is it not...?*) were more frequent in Wheatley Hill, Northeast England, than in the other English localities they studied. In the other English communities they studied, *isn't it...?* questions were more strongly preferred. They suggest that for the Scottish and Northern Irish communities they studied, there is a functional difference between these question forms (at least with the verb *is*): the *is it not* questions are rhetorical while *isn't it* requires a particular answer. They acknowledge a parallel between these questions and similar patterns that have been reported for tag questions in Scots and Tyneside English (Beal 1993). However, as outlined above, McDonald and Beal (1987) actually claim the opposite for tag questions in Tyneside English: *is it not* is information-seeking and *isn't it* is confirmatory. The difference between Tagliamonte and Smith's (2002) and McDonald and Beal's (1987) findings might reflect dialect differences between Tyneside and Scottish/Northern Irish English, or the examples in Tagliamonte and Smith's (2001) data might have other linguistic properties that lead to a different interpretation (e.g., particular intonation patterns).

Our own native-speaker intuition is that Tyneside English two-negation questions are interpreted like Standard English outer negation, meaning it is negative concord. The answer *yes* to (2), repeated here as (30), would affirm the content of the proposition, namely that she was with Frank Butcher.

(30) Q: *Was**n't** she **not** with like Frank Butcher or something ridiculous?*
A: *Yes.*

In Zeijlstra's (2004) terms as outlined in Section 1.2, we can argue that there is a covert negative operator with [iNEG], a higher negation with [uNEG] and the lower *not* with [uNEG], with an agreement relation between the operator and the two other elements.

(31) *Op* [iNEG] *Wasn't*[uNEG] *she not*[uNEG] *with Frank Butcher*?

2 Methodology

2.1 Hypotheses

Our predictions are as follows. We expect that the Tyneside-English-speaking respondents in our study will replicate the literature judgements on the interpretation of inner/outer negation when a single negative element is present. However, we also expect that

the Northeast's comparatively more frequent use of auxiliary-contraction may complicate matters, causing these questions to lack the negative neutralisation behaviours reported for Standard English. The equivalent questions in Standard British English with inner and outer negation are shown in (32)–(33). Tyneside English speakers may consider these examples to be identical, without the negative neutralisation illustrated above for inner negation.

(32) *Wasn't she with Frank Butcher?*

(33) *Was she not with Frank Butcher?*[6]

We predict that tags with one contracted negative form – i.e., ISN'T IT – and the doubled negation tags – i.e., ISN'T IT NOT – will behave as McDonald and Beal (1987) describe, and seek confirmation of the negative anchor. Finally, based on our own intuitions, we expect that two-negation main clause questions will behave like outer negation. If this turns out to be correct, we argue that this is support for the claim that Tyneside English has negative concord in these contexts.

2.2 Participants

We conducted an acceptability judgement rating study, distributed and administered online, with 29 eligible participants.[7] Of these, 24 were from Tyneside and 5 said that they were from other parts of the broader Northeast region (namely: Hexham, Durham, Sunderland, or Teesside). Two further people completed the survey but their responses were excluded as they answered "no" to the question "Are you from the Tyneside region of England?". Two people tested the survey before it was sent to participants, and their responses were also excluded. No other participants were excluded.

2.3 Survey design

Participants were presented with 46 sentences in total. The sentences formed three main sets: Set 1 consisted of single negative questions with inner and outer negation (12 sentences), Set 2 consisted of tag questions (16 sentences), and Set 3 consisted of doubled negative questions (12 sentences). The remaining six sentences were Standard English affirmative main clause questions which acted as filler items.

Before participants began the main part of the questionnaire, they were presented with a practice section with five sentences of the same format as the ones in the target sets but without the target constructions (four main clause questions without negation and one Standard English tag question).

The sentences were presented in a random order across all three categories using the Google Forms "shuffle" option so that participants each saw the sentences in a different order.

2.3.1 Set 1: Inner/outer negation

[6] Note that, if the inner negation reading is forced, the filler *like* and the disjunction *or something ridiculous* become infelicitous as a result, so they are excluded here for consistency.

[7] As our research question was not probing social variables, and we were not seeking to determine in which regions or groups the negative construction is used, we did not collect demographic information from our participants and they were recruited via our own connections. As an indication, according to the 2021 Census, the median age on Tyneside is 42. Around 93% of Tynesiders reported England as their country of birth, and 94% reported their ethnicity as a group in the "White" category, with the largest minority (around 3%) being Asian/Asian British/Asian Welsh. These figures are averaged across North and South Tyneside, which have very similar demographic information, from UK Census data (Office for National Statistics 2023a, b).

This set of sentences was included to check the interpretation claimed in the literature for inner and outer negation. As discussed in Section 1, the distinction between inner and outer negation is less clear-cut than is sometimes claimed, and for Tyneside English we wanted to test our intuition that the distinction would be blurred due to the high rates of auxiliary-contraction.

The participant read a short contextual set-up and was then presented with a dialogue, as in (34):

(34) Ash and Zahra are talking about their colleague, Saffiya, who had planned to go on holiday this week.
Ash: *Did Saffiya not go on holiday?*
Zahra: *Yes.*

Examples were constructed in pairs with a one-factorial design to test both contracted "outer" negation as in (35) and uncontracted "inner" negation as in (36). These two constructions were each paired with a positive answer four times and a negative answer two times (12 sentences).

(35) *Didn't Saffiya go on holiday?*

(36) *Did Saffiya not go on holiday?*

As our aim was to probe the interpretation of a positive or negative answer to a negated question, the participants were asked (having been instructed to assume that Zahra is being truthful) *What does Zahra believe*?. Participants chose one of the following options, which included the possibility of indicating ambiguity or saying that they were unable to tell what Zahra believed.

(37) Saffiya went on holiday.
Saffiya did not go on holiday.
Both of the above options are possible.
Don't know.

2.3.2 Set 2: Tag questions

This set of sentences was included in order to test the claims of McDonald and Beal (1987) regarding the use of tags with zero, one or two negative elements. The contextual set-up for Set 2 was similar to that for Set 1, but participants were asked how certain Ash is of the proposition in the main clause, which they rated on a Likert scale of 1 (very uncertain) to 5 (very certain):

(38) Ash and Zahra are talking about a mutual friend who did a year abroad while he was at uni.
Ash says: *He went to Spain, didn't he not?*
How certain is Ash that the friend went to Spain?

Positive and negative main clause anchors were paired with three types of negative tag in a 3x2 factorial design. The items comprised contracted single negation with the form ISN'T IT (two sentences for positive anchors and two sentences for negative anchors), uncontracted

single negation of the form IS IT NOT (two sentences for each anchor type), and two negative markers of the form ISN'T IT NOT (four sentences for each anchor type) (16 sentences). Note that we use capitals to refer to the broad construction type. Across all conditions, tags with *is* and *are* were used. The latter condition, which had an additional two sentences per anchor type, also included tags with *did* and *will*.

2.3.3 Set 3: Two-negation main clause questions

This set provided us with the data regarding the two-negation main clause questions, as in (39).

(39) *Haven't they not got a car?*

Because once again our aim was to determine the interpretation of the negation in such questions, the format of the questions was identical to Set 1, with the same set of options available to participants. They saw eight sentences with a positive answer and four with a negative answer (12 sentences). In each of the three sets, a variety of auxiliary verbs was used.

2.4 Data analysis

All quantitative analyses were carried out using the statistical platform *R* (R Core Team 2023). In Section 3, we present descriptive statistics, significance testing and/or statistical modelling techniques as appropriate for the data. The precise tests/models used are explained in each section. Section 3.1 presents the data on inner/outer negation, Section 3.2 focuses on the Likert scale responses to the tag questions, and Section 3.3 completes the results section with an analysis of the responses to the doubled negation questions.

3 Results

3.1 Inner and outer negation

We first turn to an analysis of how the participants interpreted a *yes* or *no* response to questions testing outer negation, such as *Didn't Saffiya go on holiday?*. Outer negation questions are understood with a high degree of certainty, as shown in Figure 1. There is a clear contrast in the meaning between a *yes* answer and a *no* answer to outer negation questions, which is statistically significant (Fisher's Exact Test, $p<0.001$).[8]

[8] Fisher's Exact Test is appropriate to handle the fact that some cells in the Figure 1 data have zeros (i.e., nobody said that *yes* could mean 'not-P', or that a *no* answer could mean 'P' or 'Both possible').

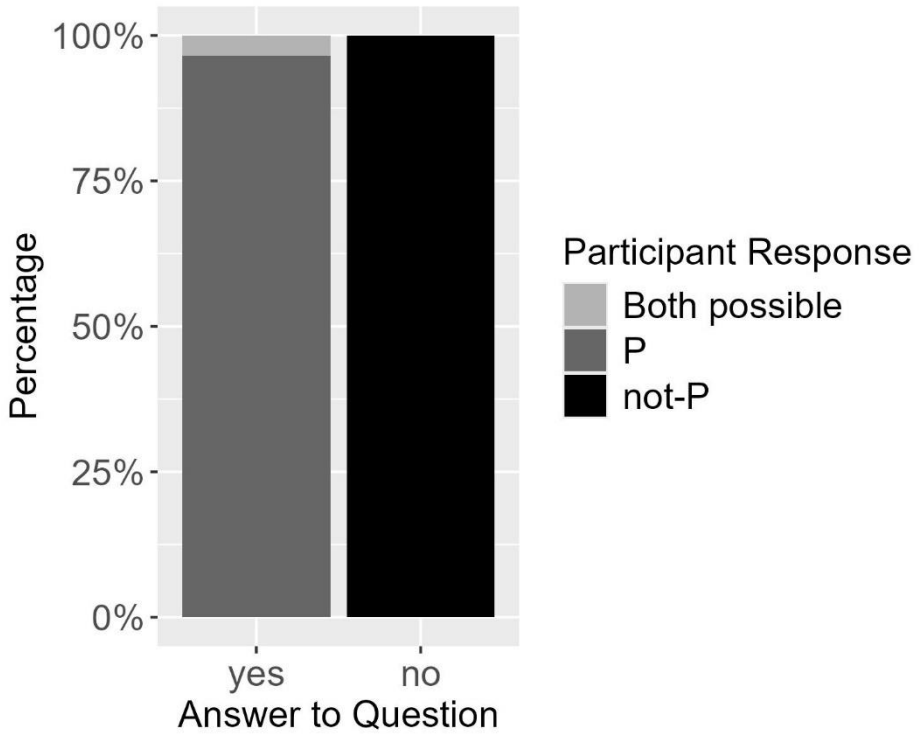

Figure 1: Participant responses to outer negation questions with *yes* vs. *no* answers

In scenarios where outer negation questions like *Didn't Saffiya go on holiday?* received a *yes* answer, the overwhelming consensus among participants is that this means that P is true – in other words, Saffiya went on holiday. Only a small percentage of responses indicated that both a P and not-P interpretation are possible. When a *no* answer is given in response to an outer negation question, this concretely expresses not-P and confirms the negative in the question, i.e., Saffiya did not go on holiday. These findings for the answers to the outer negation questions are consistent with the assumptions in the literature.

We now compare the responses to questions testing inner negation, e.g., *Did Saffiya not go on holiday?*, as shown in Figure 2. There is more variation in the responses for inner negation questions than there was for outer negation questions (e.g., there are no empty cells), so we use the chi-squared test of significance on the data in Figure 2, which shows that the distribution is statistically significant ($\chi^2 = 99.15$, df = 2, $p<0.001$).

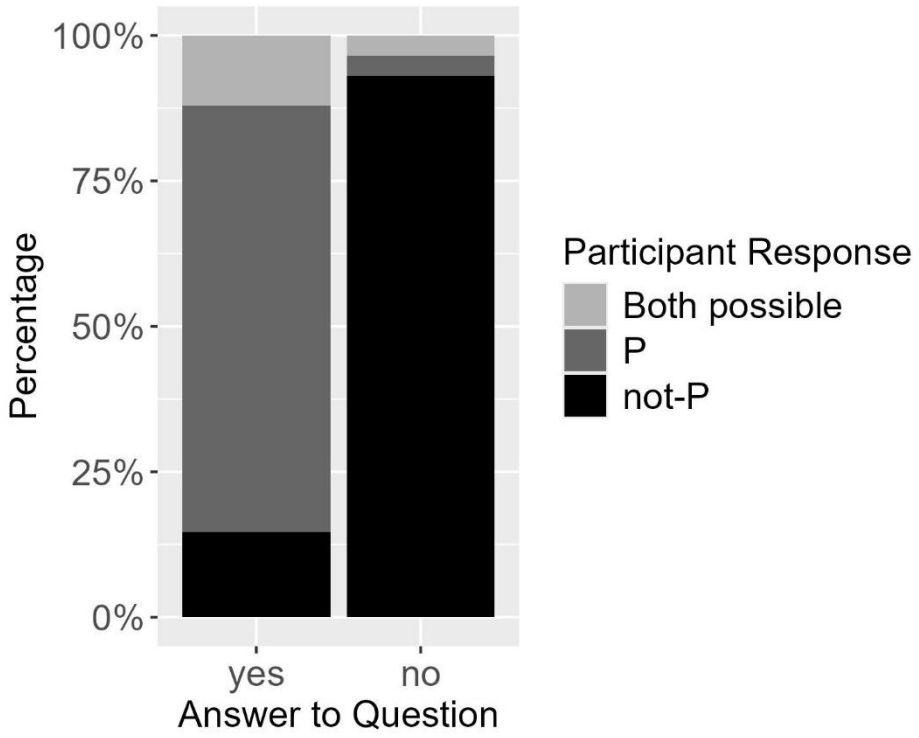

Figure 2: Participant responses to inner negation questions with *yes* vs. *no* answers

The prediction as discussed in Section 1 was that there would be negative neutralisation, i.e., either a *yes* or a *no* answer to an inner negation question would be interpreted as "not-P". The distribution in Figure 2 shows that, for the most part, this is not actually the case. A *yes* answer to an inner negation question like *Did Saffiya not go on holiday?* is most often interpreted as confirming the affirmative, i.e., she went on holiday, with 73.3% (85/116) of responses reflecting this. However, there is variation, with 14.7% (17/116) of responses confirming the previously predicted pattern that *yes* means 'not-P'and 12.1% (14/116) of responses indicating that both P and not-P interpretations are possible. Therefore, there is some ambiguity with a *yes* answer with inner negation. On the other hand, when *no* is the answer to an inner negation question, there is a strong consensus that not-P is the natural interpretation, i.e., a *no* answer confirms a negative – Saffiya did not go on holiday – as predicted.

3.2 Negative tag questions

To test McDonald and Beal's (1987) claims about the use of negative tags in Tyneside English, we analyse participants' responses to Set 2 of the test sentences in our survey. Participants considered scenarios where someone named Ash used a negative tag, e.g., *He went to Spain, didn't he not?*. The task was to rate how certain Ash was of the proposition that had been introduced in the anchor clause, on a scale of 1 (very uncertain) to 5 (very certain). Recall from Section 2 that three types of negative tag were investigated: ISN'T IT, IS IT NOT, and ISN'T IT NOT. As before, we use capitals to refer to the tag forms, which represent a range of verb forms (including *is* – see section 2). These were attached to both positive and negative anchor clauses.

We begin with an overview of the mean average ratings of certainty per tag type with each anchor type, as shown in Figure 3. The error bars represent confidence intervals for the means.[9]

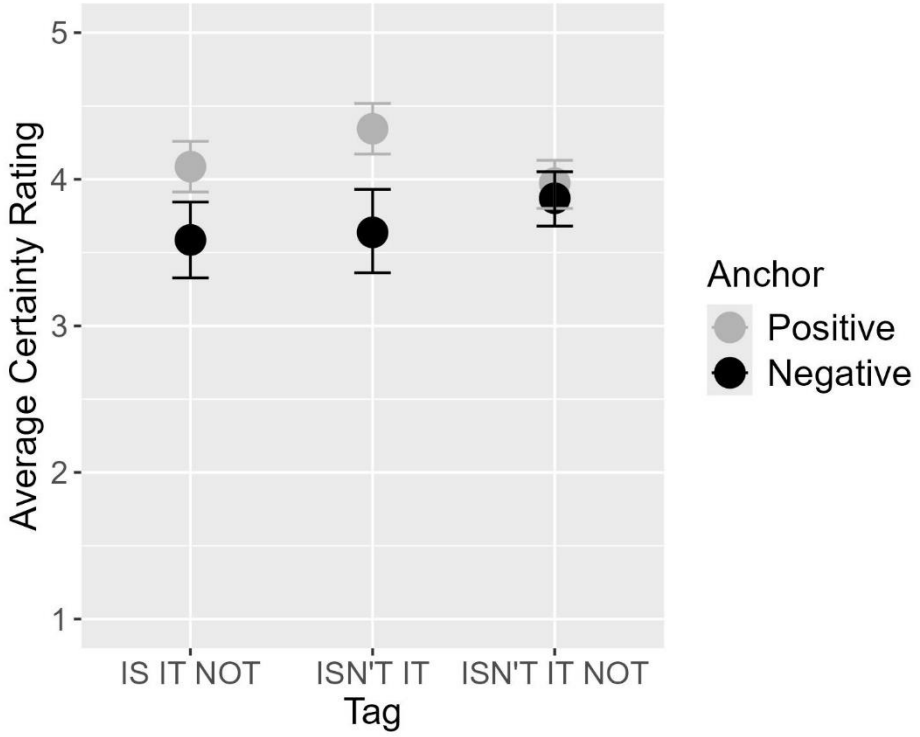

Figure 3: Average ratings of the degree of certainty expressed by tags attached to positive vs negative anchors

Figure 3 shows that the hierarchy of tags in terms of the average degree of certainty they express with positive anchors is as follows: ISN'T IT > IS IT NOT > ISN'T IT NOT. With negative anchors, the hierarchy is: ISN'T IT NOT > ISN'T IT > IS IT NOT. Further statistical analysis is carried out below, but these initial results for positive anchors are consistent with McDonald & Beal's (1987) proposal that ISN'T IT is confirmatory while IS IT NOT is more information-seeking, i.e., it expresses less certainty, in the same context. Our results also support their claim that ISN'T IT NOT seeks confirmation of a negative whereas IS IT NOT is information-seeking in the same context, i.e. the speaker is less certain of the proposition. Figure 3 also shows that the distinction between positive and negative anchors is neutralised for the tag ISN'T IT NOT.

To establish the relative contribution of tag type and anchor type to the degree of certainty that each tag type is deemed to express, we carry out statistical modelling of the data in *R* (R Core Team 2023) using the "ordinal" package (Christensen 2022). This package allows us to generate cumulative link mixed models, i.e., ordinal regression models, that are suitable for Likert Scale responses, where the data is categorical but ordered on a scale. We used the default link function with this package (logit).

Table 1 presents the results of an ordinal regression model using treatment coding. Treatment coding entails that, for each factor, one level is selected as a reference level. For Tag Type, IS IT NOT tags are the reference level value. This means that the responses to the two

[9] These were generated using the mean_cl_boot() function which uses a bootstrap method for calculating the confidence intervals and does not assume a normal distribution.

other tag types – ISN'T IT and ISN'T IT NOT – are compared against the responses to IS IT NOT. For Anchor, positive anchors are the reference level; negative anchors are compared against these. An interaction effect of Anchor and Tag Type is also included. "Participant" is included as a random effect, to account for individual-level variation in responses.

Table 1: Results of a cumulative link mixed model of the rating of certainty expressed by negative tags with positive or negative anchors

	Estimate	**St. Error**	**Z-value**	**P-value**	**Significance**
Tag Type [reference level: IS IT NOT]					
ISN'T IT	0.705	0.360	1.962	0.050	*
ISN'T IT NOT	-0.163	0.302	-0.538	0.591	
Anchor [reference level: POSITIVE]					
Negative	-0.995	0.350	-2.838	0.005	**
Tag Type : Anchor					
Negative : ISN'T IT	-0.529	0.505	-1.048	0.294	
Negative : ISN'T IT NOT	0.857	0.432	1.982	0.047	*
Random effect: Participant	Standard deviation 0.9952				

As the results in Table 1 show, ISN'T IT tags are interpreted as expressing a higher degree of certainty than the reference level tag, IS IT NOT, in a statistically significant result. ISN'T IT NOT, on the other hand, is not statistically distinguished from the reference level of IS IT NOT.

There is also a statistically significant effect of the anchor, in which tags attached to negative anchors express less certainty than those attached to positive anchors. However, there is an interaction effect between tag type and anchor for ISN'T IT NOT, which is perceived as expressing a higher degree of certainty when attached to a negative anchor compared to the other tags.

These findings are consistent with the overall tendencies in the data shown in Figure 3 and confirm that overall ISN'T IT expresses the strongest degree of certainty compared to ISN'T IT NOT and IS IT NOT, i.e., it is the most confirmatory. However, when attached to negative anchors, ISN'T IT NOT expresses a higher degree of certainty as compared to the baseline environment of IS IT NOT with positive anchors, while there is no such statistically significant difference between the baseline and ISN'T IT with negative anchors. These findings are consistent with McDonald and Beal's (1987) proposal that ISN'T IT seeks confirmation while IS IT NOT is information-seeking, i.e., it expresses less certainty. Furthermore, our results support McDonald and Beal's (1987) claim that ISN'T IT NOT seeks confirmation of a negative (a negative anchor) whereas IS IT NOT is more information-seeking in the same context, i.e., the speaker is less certain of the proposition.

3.3 Two-negation questions

Our final analysis concerns the negative questions with two apparently negative elements, e.g., *Wasn't she not the lead singer's daughter?*. Eight interrogatives were in the context of a *yes* answer and four were in the context of a *no* answer. Participants responded with one of four judgements to reflect their interpretation of whether the proposition in the question was true or not. For example, with the aforementioned question, the options were:

"She was the lead singer's daughter" (P), "She was not the lead singer's daughter" (not-P), "Both of the above options are possible" or "Don't know". Figure 4 shows the percentage of each response given to two-negation questions with *yes* vs. *no* answers in the scenarios.

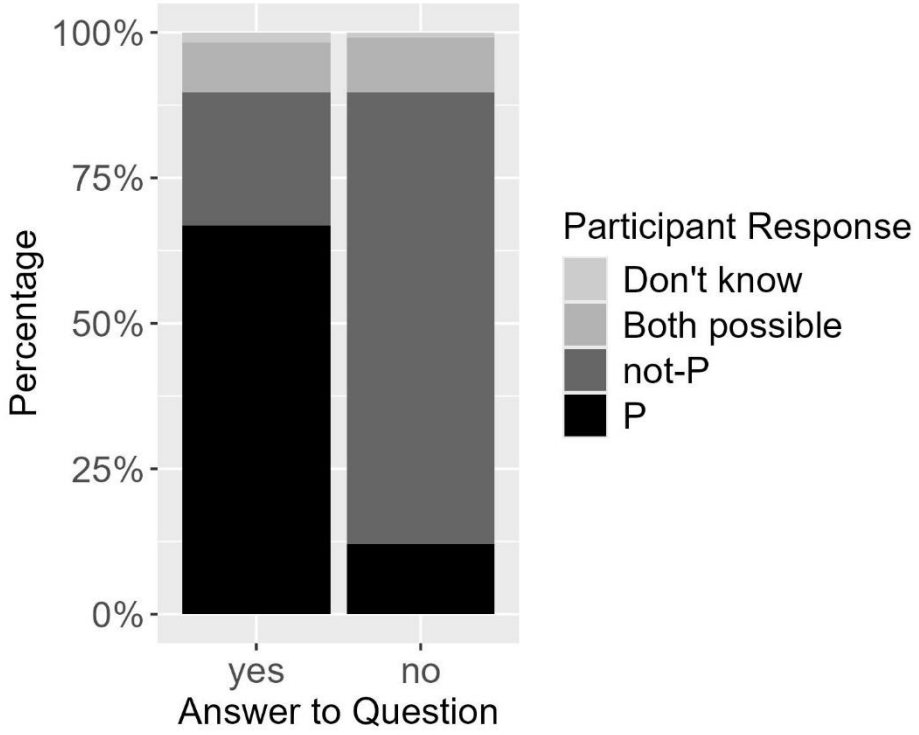

Figure 4: Participant responses to two-negation questions with *yes* vs. *no* answers

Figure 4 shows that, most of the time (66.8%, 155/232), people interpret a *yes* answer to a two-negation question as affirming the proposition. 22.8% (53/232) of responses reflect an interpretation of *yes* to mean not-P and 8.6% (20/232) indicated that both P and not-P were possible interpretations. A *no* answer is, most of the time (77.6%, 90/116), interpreted as negating the proposition. A minority of responses indicate that a *no* means P (12.1%, 14/116) or that both P or not-P were possible (9.5%, 11/116). Only very few responses were "don't know", however, across both *yes* and *no* answer contexts (5/348, 1.4%).

To analyse the statistical significance of these findings, we present three generalized linear mixed models (GLMMs) created using the lme4 package (Bates et al. 2015) in *R* (R Core Team 2023). These models allow us to establish whether affirmative interpretations (P) and negative interpretations (not-P) are significantly more or less likely with *yes* or *no* answers to the questions. Each GLMM has a different application value – "P", "not-P", "both possible". In other words, one model measures the factors that contribute to a "P" interpretation (over all other interpretations), a second model does the same for "not-P" and then a third model does the same for "both possible". As shown in Figure 4, "don't know" was also available to participants, but this comprised a very small proportion of the dataset and thus was excluded from the statistical modelling. Each model, shown in Table 2, includes as a fixed factor whether the response to the question in the scenario was *yes* or *no*. We used treatment coding, with the reference level as *yes*; the scenarios with *no* were compared against that reference level. "Participant" was also included as a random effect to account for individual-level variation in the responses.

Table 2: Results of generalized linear mixed models for responses (P, not-P, both possible) to doubled negative questions

	Estimate	**St. Error**	**Z-value**	**P-value**	**Significance**
Model 1: Application value = P					
(Intercept)	0.770	0.158	4.888	1.02e-06	***
Answer [reference level: *yes*]					
No	-2.786	0.332	-8.389	<2e-16	***
Random effect: Participant	Standard deviation 0.3199				
Model 2: Application value = not-P					
(Intercept)	-1.205	0.166	-7.262	3.83e-13	***
Answer [reference level: *yes*]					
No	2.499	0.287	8.701	<2e-16	***
Random effect: Participant	Standard deviation 0.2101				
Model 3: Application value = Both possible					
(Intercept)	-4.929	1.592	-3.096	0.00196	**
Answer [reference level: *yes*]					
No	0.146	0.470	0.311	0.756	
Random effect: Participant	Standard deviation 3.072				

As shown in Table 2, the results for Model 1 show that an affirmative interpretation (P) is significantly less likely when the answer to a two-negation question is *no*. Model 2 shows that a negative interpretation (not-P) is significantly more likely when the answer to a two-negation question is *no*. Finally, the results for Model 3 show that there is no significant effect of a *yes* or *no* answer on the "both possible" interpretation of the scenario. In summary, with two-negation questions, a *yes* answer typically means P and a *no* answer typically means not-P, corroborating the distribution in Figure 4.

4 Discussion

4.1 Testing claims in the literature: Inner/outer negation

Our first aim with the questionnaire was to check respondents' judgements regarding questions with a single inner or outer negation, given that these are widely discussed in the literature and could form a benchmark for our further questions. Based on previous work, we expected respondents to interpret a *yes* answer to a question with outer negation to mean P, and a *no* answer to mean not-P. Our results confirmed that this is the case in the overwhelming majority of instances. We take this to be a result of the outer negation being "outside" the questioned proposition, as per the previous analyses discussed in Section 1.

With inner negation, prior work (e.g., Kramer and Rawlins 2009) claims that the distinction between *yes*=P and *no*=not-P collapses and both answers mean not-P (negative neutralisation). However, the ready availability of uncontracted negation in Tyneside English suggested that this might affect the interpretation for our respondents. This was the case, and questions with inner negation behaved more like outer negation most of the time. We did,

though, find a shift towards the direction claimed in the literature (i.e., towards not-P), with 14.7% (17/116) of responses indicating that people interpreted a *yes* answer as meaning not-P and 12.1% (14/116) considering both P and not-P to be possible interpretations.

We suggest that the lack of negative neutralisation among our respondents is because of interaction with the Northeastern higher rates of auxiliary-contraction, whereby the uncontracted negation is in fact not interpreted as being low/inner and is in a "middle" position, following Holmberg (2013). Holmberg notes the pattern we describe here among data collected in the same dialect area. He accounts for this variability of the interpretation of inner negation, arguing that *yes* confirms not-P if *not* is low, and confirms P if *not* is "middle" negation. Holmberg suggests that middle negation is located between T and vP, interpreted within TP but taking sentential scope, and that low negation is vP/VP-adjoined constituent negation (Klima 1964: 289).

It is possible to see the distinction between the low negation and the middle negation when an adverb forces a low interpretation and a *yes* answer confirms not-P:

(40) *Did you purposely not dress up for this occasion?*
Yes (that's right, I purposely didn't dress up).
(Holmberg 2013: 40)

The Northeastern interpretation where the uncontracted *not* behaves like outer negation (and *yes* means P) is no longer available when this adverb is present. This indicates that the "middle" negation is located, or at least interpreted as being located, somewhere above the adverb. As noted, Holmberg (2013) places it between T and vP. He is not explicit about exactly where this position is, however, and in section 4.3 we suggest an analysis that draws on this idea of a middle negation together with elements of Tubau's and Zeijlstra's feature-based analyses to explain the variation we find in Tyneside English two-negation questions.

4.2 Testing claims in the literature: Tag questions

Here we sought to test McDonald and Beal's (1987) claims regarding the use of tag questions with the same two-negation structure as in our main clause questions. McDonald and Beal's (1987) claims are based on corpus data and fieldworker observations with little reference to quantitative figures, but our results show that their observations are indeed supported by quantitative evidence, despite the 40–50-year time gap between the recordings in their primary Tyneside English corpus from the 1970s and the timing of our questionnaire in 2022.

We expected our respondents to agree with their claims that, with a negative anchor, aux+subject+not tags (IS IT NOT) are information-seeking, while those with two negative elements, aux+n't+subject+not (ISN'T IT NOT), seek confirmation of a negative anchor. Our results confirmed this interpretation. We also sought to test McDonald & Beal's claims that, with a positive anchor, IS IT NOT is information-seeking while ISN'T IT is confirmatory – i.e., the latter expresses a greater degree of certainty in the proposition – which was also confirmed.

McDonald and Beal (1987) did not make any claims as to the ISN'T IT NOT tag's function with *positive* anchors. Our results show that the tag is more confirmatory with negative anchors than positive anchors (see also Jamieson (under review) regarding the confirmatory nature of doubled negative tags with negative anchors in some varieties of Scots).

A summary of the predictions from McDonald and Beal (1987) and our results for each tag/anchor combination is shown in Table 3.

Table 3: Summary of McDonald and Beal's (1987) claims regarding the function of tag + anchor combinations and how our results compared

	IS IT NOT		**ISN'T IT**		**ISN'T IT NOT**	
	McDonald & Beal (1987)	**Our results**	**McDonald & Beal (1987)**	**Our results**	**McDonald & Beal (1987)**	**Our results**
Positive anchors	Info-seeking	✓	Confirmatory	✓	[no prediction]	More info-seeking with positive anchors
Negative anchors	Info-seeking	✓	[no prediction]	More info-seeking with negative anchors on average, but not statistically significant in model	Confirmatory	✓

The summary in Table 3 demonstrates that IS IT NOT is more information-seeking in nature, regardless of the polarity of the proposition. ISN'T IT and ISN'T IT NOT seek confirmation of the relevant proposition contained in the anchor: P for the former, and not-P for the latter with its two negative elements.

The tag with two negative elements seeks confirmation of the negative, which supports our claim in the next section that this construction is similar to outer negation. As noted above, questions with a high (outer) negative element are necessarily biased towards the questioned proposition (see (19), *Isn't it nice out?* vs *Is it not nice out?*). In this case, the bias is towards not-P rather than P as the (questioned) anchor clause contains its own negative element, comparable to our earlier example (20) (*Hasn't Frege not reviewed for us yet?*) with a bias towards not-P.

We turn next to the main focus of our study, main clause questions with two negative elements.

4.3 Tyneside English two-negation questions explained

Tyneside English two-negation questions were interpreted such that the answer *yes* confirms P, as predicted if they are negative concord and equivalent to outer negation. This finding is interesting because while many British English varieties have negative concord with NCIs, we do not find negative concord with sentential negation in those varieties. However, they are found in the variety that Labov (1972) refers to as "Black English", as shown in this example from a young speaker from Harlem, New York (41), as well as in other languages (see Section 1, and Van Alsenoy and van der Auwera 2014 who show that the two phenomena are distinct but frequently co-occur).

(41) *He ain't not no Collins*

(Speedy J., age 15)
(Labov 1972: 805)

We analyse the Tyneside English negative concord as follows. We follow Zeijlstra (2004) in analyzing Standard English *n't* as a head X^0 of NegP, and having an interpretable [iNEG] feature. *not* is a vP-adjoined XP which can be interpreted as negative "without further syntactic marking" (Zeijlstra 2004: 176; see also Tubau 2016). However, we argue that in Tyneside this *not* may have [uNEG]. We thus extend Tubau's (2016) analysis outlined in Section 1, in which she proposes that NCIs in non-standard varieties of British English may have either an interpretable [iNEG] or uninterpretable [uNEG] feature, to the negative adverb *not* in Tyneside English.

This allows us to present the following: in Standard British English constructions with uncontracted (inner) negation, *not* is vP-adjoined and carries semantic negation with [iNEG]. In Standard English, outer negation *n't* is a head of NegP and carries the interpretable [iNEG] feature. In Tyneside English two-negation questions like *isn't it not*, *n't* and *not* both carry uninterpretable [uNEG] which are feature checked by a covert operator with [iNEG], giving negative concord.

(42) [$Op_{[iNEG]}$ [NegP [Neg $n't_{[uNEG]}$ … [$not_{[uNEG]}$]]]

We argue this on the basis of the existence of strict negative concord in Tyneside English: our example (28) above (*Not everyone doesn't know*) appears to be an example of subject negative concord of the sort discussed by Robinson and Thoms (2021), which is found in some traditional UK varieties including in Northern England (Anderwald 2005: 108-109; Tubau 2016: 148, 168). According to Zeijlstra (2004), this covert negative operator with an interpretable [iNEG] feature is characteristic of strict negative concord languages. This is consistent with existing analyses of Standard English outer and inner negation and accounts for the lack of a "double negative" interpretation in Tyneside English two-negative questions.

Our analysis takes a different approach than Jamieson (under review), who argues that the *-int* form in Scots *-int*-Subject-*no* tags is a CHECK marker in the left periphery and that the tag contains no negation at all, despite first appearances. Jamieson posits that *-int* originated as a negative marker but has since grammaticalised to the extent that the tags no longer question anything. One difference between Scots *-int* and Tyneside *-n't* is that while the former is restricted to tag questions and exclamatives (Jamieson under review), the form *-n't* appears in other syntactic contexts including the matrix questions discussed here. Jamieson (under review) argues that this *-n't* in Tyneside tags is a different form to the *-n't* appearing in declaratives. Our results have, however, shown that ISN'T IT NOT tags are more confirmatory with negative anchors than positive anchors, which one wouldn't necessarily expect if the *-n't* is a CHECK marker in Tyneside English. Despite these differences between Jamieson's account and ours, the two accounts nevertheless share a common assumption that neither "negative" element in the doubled negation tags (or main clause questions, as discussed in this chapter) is inherently negative.

However, it is necessary to adjust our account slightly to take into consideration the variation in the interpretations of these constructions. While the majority interpreted a *yes* answer to a question with Tyneside English-type negation as confirming P and thus an instance of negative concord, there was a minority who interpreted it as confirming not-P. Confirming not-P is the interpretation we would expect for inner negation based on the literature. While our respondents did not in general select not-P as the interpretation for inner negation, as shown again here in Table 4, the same pattern was found as in our respondents' choices for two-negation questions. In both two-negation and inner negation questions, the virtually categorical

difference between *yes* and *no* answers shifts somewhat towards negative neutralisation, with a majority still interpreting the answers this way but with a clear secondary interpretation in which *yes* confirms not-P.

Table 4: Participant interpretations of inner negation and doubled negation questions when a *yes* answer was given

	Yes=P	Yes=not-P	Yes=both possible
Inner negation	73.3% (85/116)	14.7% (17/116)	12.1% (14/116)
Two negative elements	68.0% (155/228)	23.2% (53/228)	8.8% (20/228)

We therefore argue that our respondents' interpretation of uncontracted inner negation (*is it not*) and questions with two negative elements are both due to the possibility of the lower negation having [uNEG] in Tyneside English or [iNEG] in Standard English.

As argued above, the lower negative *not* in our Tyneside English structures with two negative elements has an uninterpretable formal feature [uNEG]. As shown in (42), it enters into an Agree relation (along with *n't*) with the covert negative operator, which has the interpretable [iNEG] feature, resulting in a single negative interpretation. This is an instance of negative concord, and we would expect it to be interpreted exactly like outer negation, where a *yes* answer confirms P and a *no* answer confirms not-P.

We suggest that Northeastern *is it not* also involves low negation with [uNEG], even when a single negative element is overt. This uninterpretable feature must Agree with an element bearing interpretable [iNEG], the abstract negative operator, and the Agree relation results in a negative concord chain with only one overt negative element. Also available to Tyneside English speakers, who are bidialectal with the standard variety, is the low *not* with [iNEG], as noted for standard British English *is it not*. The two instances of negation "cancel out" and give a double negation reading, which is readily available to Tyneside English speakers given the appropriate intonation. This variation explains the shift towards the negative neutralisation interpretation in both inner and two-negative constructions, as some respondents allowed that the lower negation might have [iNEG] and thus a "low" interpretation. We thus find the following typology:

Table 5: Negation and (un)interpretable features in Standard English and Tyneside English

All varieties	*Isn't*$_{[iNEG]}$ *it*	Outer negation
Standard English	*Is it not*$_{[iNEG]}$	Inner negation
	Isn't$_{[iNEG]}$ *it not*$_{[iNEG]}$	Double negation
Tyneside English	*Op*$_{[iNEG]}$ *Is it not*$_{[uNEG]}$	Negative concord
	Op$_{[iNEG]}$ *Isn't*$_{[uNEG]}$ *it not*$_{[uNEG]}$	Negative concord

4.4 Further questions and implications

An immediate prediction is that, given the information- vs confirmation-seeking distinction that we found between tags with one or two negative elements, we might expect the same to be true of the two types of Tyneside English main clause negation shown in Table 5. We do not have the relevant data to answer this question, but it would be an interesting

counterpart to the data regarding the inherent bias towards a positive proposition of outer negation questions discussed in Section 1.3.

A question also arises: as we have two possible locations for the negation (middle and low, as discussed in Section 4.1), and high negation can combine with a lower negative element in Tyneside English to give a negative concord interpretation, we might wonder whether it is possible to have both negative concord and semantically interpreted lower negation in the same clause. This does appear to be the case. Such examples are not found in corpora because they are simply too rare, but the following example seems acceptable (albeit uncommon) to us as speakers of Tyneside English:

(43) *Didn't you not not dress up, though?*

(43) is interpreted as meaning something like 'Isn't it the case that you did not dress up?', in other words equivalent to Romero and Han's example in (20) (*Hasn't Frege not reviewed for us yet?*). Compare the same example with an adverb illustrating the different positions of the negative elements:

(44) *Didn't you not deliberately not dress up, though?*

(44) also raises the very important issue of prosody. For example, the fact that some respondents interpreted the construction with two negative elements similarly to inner negation is due to interaction with the possibility of its being interpreted as a low negative adverbial with interpretable [iNEG] as in (21) and (40). The two negative constructions have different intonation, but our examples were presented in written form. Romero et al. (2017) argue that the presence or absence of a final high rise intonation differentiates inner and outer negation, and Holmberg notes that judgements can be reversed "subject to subtle lexical and prosodic cues" (2013: 47). The fact that Tyneside English favours rising intonation more generally, including with declaratives, but these rises are of different types – e.g., "rise-plateau" and "rise-plateau-slump" (Cruttenden 1997) – may further blur the inner/outer negation distinction. We have not addressed this issue in this paper for reasons of practical limitations, but it is clearly important for future work on this topic.

Our research has extended the study of questions with two sentential negation elements from tags, as studied by McDonald and Beal (1987), to main clause questions. Our argument in this paper is that *not* can have [uNEG], giving the negative concord interpretation of questions with two negative elements. This implication of this, though, is that we should find negative concord with *n't/not* + *not* more generally in the variety, and we do not. Even in Tyneside English, (45) is interpreted as double negation and not negative concord:

(45) *I can't/cannot not see them.*

Jamieson (under review) shows that the *int*-subj-*no* construction is restricted to tags and exclamatives in Scots. The Scots Syntactic Atlas (Smith et al. 2019) includes a declarative example that is potentially comparable to the Tyneside English doubled tags *I cannae no see them*, but this is not rated as highly acceptable: it is at best rated 3: "I might use this, it's a bit unnatural". Similarly, in Tyneside English this type of negative concord is restricted to interrogative contexts, although unlike the Scots varieties it is found in matrix questions as well as tags. We leave investigation of the reason for its ungrammaticality in declaratives open for now, but provide the following speculation: many Tyneside English speakers have free variation between *Isn't it* and *Isn't it not* structures. In interrogatives, the relevant string is phonologically identical across these two constructions (*Is(n't) it not*) (46) and so more likely

to allow the doubling up required for Jespersen's Cycle, whereas in declaratives, the two are distinct (*It's not*/*It isn't*) (47), and both parts of the negation cannot be pronounced. As argued by Zeijlstra (2008), provided the element with [uNEG] is overt, the element with [iNEG] has been made "visible" and there is no requirement for it to be phonologically realised.

(46)	*Is*	*n't*	*it*	
	Is		*it*	*not*
	Is	*n't*	*it*	*not*

(47)	*It*	***'s***		*not*
	It	***is***	*n't*	
	It	*is*	*n't*	*not*

5 Summary and conclusion

First, we have shown that the Standard English inner/outer negation distinction made in the literature is less clearcut in Tyneside English, a non-standard variety of English spoken in Northeast England. A *yes* answer to a question with inner negation confirms P most of the time, contrary to predictions where *yes* and *no* should collapse and confirm not-P.

Secondly, we have shown that Tyneside English has a distinctive tag ISN'T IT NOT – an example of negative concord – alongside ISN'T IT and IS IT NOT, and confirmed McDonald and Beal's (1987) claim that while ISN'T IT seeks confirmation of a positive, ISN'T IT NOT seeks confirmation of a negative proposition.

Finally, we have brought to light a previously unstudied phenomenon, two-negative main clause questions, and shown that the interpretation of these questions patterns like that of outer negation. We thus analyse this as a type of negative concord, as part of the language's progression from Jespersen's Phase V (double negation) to Phase I (true negative concord) noted by Zeijlstra (2004).

We therefore provide an account building on Tubau (2016)'s analysis of NCIs in British English dialects in which *not* can vary in its feature specification in Tyneside English vs standard varieties, encompassing the variation we find in the interpretation of apparently "inner" negation and explaining the existence of negative concord in Tyneside English.

Abbreviations

1 'first person', 3 'third person', CONT 'continuous', LINK 'linker', NEG 'negation', NOMIN 'nominalisation', NONLOCUT 'non-locutor person marker', TOPIC 'topic marker', SG 'singular'

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