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Questions, biases and ‘negation’:  
Evidence from Scots varieties

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Doctor of Philosophy  
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# Declaration

I declare that this thesis was composed by myself and that the work contained therein is my own, except where explicitly stated otherwise in the text, and that this work has not been submitted for any other degree or qualification.

*(E A Jamieson)*

# Abstract

In recent years, there has been considerable linguistic interest in ‘non-canonical questions’ (Dayal 2016). These constructions express some quantity of interrogative meaning, as well as some additional bias, or some additional request beyond pure information seeking. This category includes four constructions with ‘negation’, which look superficially similar but have received varying analyses in the literature: matrix biased questions; tag questions; polar rhetorical questions, and interrogative exclamatives. In this thesis, I address the question of how these constructions are related, and argue that the relationships between these four ‘non-canonical questions’ are closer than the existing literature suggests, building on and extending work from Sudo (2013) and Domaneschi et al. (2017) who establish a framework for using speakers’ epistemic beliefs and the biases provided by the evidential context to account for matrix biased questions. In order to develop this overarching argument, I focus primarily on two constructions that have received little attention in the literature: *-int* in Glasgow Scots and *-n* in the Shetland dialect of Scots. I adapt an acceptability judgment style methodology for dialect syntax research to incorporate recent work on non-canonical questions in experimental pragmatics in order to establish the distribution of these particles across constructions and belief/bias contexts. As part of this, I also qualitatively investigate how speakers of different ages in communities with different relationships to linguistic change interact with this common methodology for investigating linguistic variation, positing what I term ‘perceptual hyperdialectalism’ for the patterns of behaviour we see in an obsolescing variety. From the results of the Scots research, I show that *-int* is acceptable in a subset of the ‘non-canonical questions’, with *-n* available in the full set for older speakers but seemingly undergoing loss in one context and moving towards the distribution of Glasgow *-int* for younger speakers. This suggests that we should indeed treat the non-canonical question constructions as more closely related than the literature suggests. I then provide an analysis for the *-int* and *-n* constructions, arguing that they are CHECK moves by establishing the pragmatic similarities between the constructions that permit the

particles and then developing a semantic analysis for them within Ginzburg's (2012) interactional semantics for dialogue. The final part of this analysis is to position the particles syntactically. I do so by employing a conversational domain in the syntax above CP, and by arguing for movement to this domain I build on existing literature that shows that discourse particles exhibit syntactic behaviour and should be analysed as such.

My analysis of the Scots data has three main contributions: firstly, a full description and analysis of the previously understudied Scots particles; secondly, an analysis for standard English tag questions that clearly shows how they differ from the Scots constructions and is also able to deal with problematic data from the literature more accurately than other proposals; thirdly, new evidence that there needs to be more fine-grained distinctions made, based on beliefs and biases, between the types of conversational move that are made in e.g. tag questions and invariant particles, often grouped together as 'confirmational' or 'checks'.

As well as the Scots data, I also address the relationship between the four non-canonical questions through two sets of constructions in standard English. Firstly, I present the results of an experiment which shows that although both matrix biased questions and tag questions are permitted in neutral and negative evidential contexts, speakers prefer biased questions in negative contexts, and tag questions in neutral ones. I show that this follows from the analysis I presented for the syntax and semantics of tag questions in standard English, and suggest that the results point towards a scalar model of beliefs and biases as the best way to understand the licensing of interrogative constructions.

Finally, I look at polar rhetorical questions and rhetorical *wh*-questions. In the literature, these constructions receive the same analysis throughout. However, the Scots data indicates that the bias that is, or can be, expressed in polar rhetorical questions is not the same as the bias that is expressed in rhetorical *wh*-questions. I argue that polar rhetorical questions should receive the same analysis as matrix biased questions, following Romero's (2015) FALSUM/VERUM approach to the construction, and show that this cannot hold for *wh*-questions. I then extend Kotek's (2016) semantics for *wh*-questions to also include rhetorical *wh*-questions, showing how this can account for a number of properties that these constructions have (e.g. polarity flipped vs. non-flipped instances, NPI licensing, lack of pair-list readings and 'generic' interpretations).

# Lay Summary

The primary purpose of asking an interrogative is to find out information. However, sometimes questions do more than just seek information – for example, they might express that the speaker has some sort of belief as to what the answer to the question should be. Rhetorical yes-no questions (‘Didn’t I tell you it would be great?!’) are an obvious example; others include biased questions (‘Didn’t she come too?’), tag questions (‘They arrived, didn’t they?’) and interrogative exclamatives (‘Isn’t it a lovely day!’). This group of ‘non-canonical questions’ (Dayal 2016) look similar on the surface, but have been given varying analyses in the literature that suggests they are unrelated, or at best in two distinct subgroups. However, I believe that the relationships between these constructions are closer than has previously been suggested – this question of how the different constructions are related is the central question of my thesis.

In order to investigate this question, I focus on data from two Scots varieties: Glasgow Scots and the Shetland dialect of Scots. Each of these varieties has a particle that seems to appear in some interrogative constructions: *-int* in Glasgow Scots (e.g. ‘She can come, kint she?’) and *-n* in Shetland dialect (e.g. ‘She can come, can’n she?’). I use acceptability judgment tasks to establish the distribution of these particles across contexts, and show that Glasgow *-int* is only available in 3 of the 4 non-canonical questions named above, while Shetland dialect *-n* is only available in the 4 constructions for older speakers, and 3 of the 4 for younger speakers.

Based on the results of this data collection process, I develop a pragmatic and semantic analysis for the meaning of the Scots particles that focuses on the relationship between the speaker and the other conversation participants, and what information is assumed to be shared between them. I also propose a syntactic analysis for constructions that include the particles, building on recent work on incorporating conversation participants’ perspectives and goals into syntax. Throughout, I show how the analysis for the Scots particles must be distinct from the analysis required for the constructions in standard English. The English analysis I present brings together the four non-canonical

constructions under one umbrella.

In the final two chapters of the thesis, I test the relationships between the four constructions using standard English data. Firstly, I present the results of an experiment which shows that speakers have strong intuitions about when a biased question should be used and when a tag question should be used, despite the fact that both are technically available in the same contexts. Secondly, I investigate the relationship between rhetorical yes-no questions and rhetorical *wh*-questions (‘Who wouldn’t want to go to the party?!’). I show that the analysis I put forward for non-canonical questions (including rhetorical yes-no questions) cannot apply to the *wh*-question cases. I thus provide an alternative analysis for the *wh*-question cases that can account for a number of properties that they exhibit, some of which have previously not been discussed in the literature.



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# Chapter 1

## Introduction

Questions are generally understood to be information-seeking constructions, where the speaker asks for their addressee to provide them with some information. Cross-linguistically, question constructions can be signalled in various ways: in English, ordinary polar questions like (1) are characterised by both syntactic properties (subject-auxiliary inversion) and intonational properties (rising intonation).

(1) Can Emily come to the ↗party?

The notion of a question therefore appears, superficially, straightforward – a speaker does not know something, and asks an addressee to provide the required information through use of a construction that differs in its surface form from a declarative proposition. Semantically, questions are taken to denote sets of propositions (Hamblin 1973, Karttunen 1977), and in answering the question, the addressee selects which proposition from the set holds in the world. For a question like (1), the addressee would simply select between two propositions: *Emily can come to the party* ( $p$ ) or *Emily cannot come to the party* ( $\neg p$ ).

However, there is a growing literature on a group of constructions that I will term ‘non-canonical questions’, following Dayal (2017). These questions may behave differently from standard interrogatives in terms of their syntax, and appear to express different conversational goals. These constructions may also have complex relationships with negation, and express meanings that contradict the surface polarity of the clause. At the semantic/pragmatic level, non-canonical interrogative constructions thus pose questions as to what sort of information is required to license interrogatives, and whether/how this information is built into in the construction itself. At a syntactic level, non-canonical questions raise the question of how much discourse is encoded in syntax, and how that

should be modelled. This thesis will engage with these major syntax/pragmatics interface questions through detailed empirical investigation of two particles in two Scots<sup>2</sup> varieties: *-int* in Glasgow Scots, and *-n* in the Scots spoken in the Shetland Islands. Debate surrounds the nomenclature used for this variety (see e.g. Tait (2007)). In this thesis, I will refer to it as ‘Shetland dialect’.

(2) They’ve left, **hint** they? (Glasgow, Thoms et al. 2013)

(3) *Is’n shö a boanny ting?*  
 is.N she a pretty thing  
 ‘Isn’t she pretty?’

(Shetland, Robertson and Graham 1952:10)

As can be seen from these examples, *-int* and *-n* seem to be used in places where standard English would use negation in a non-canonical question. It is therefore non-canonical question constructions with negation that I focus on in this thesis: negative polar questions (or ‘biased questions’) (4), tag questions (5), rhetorical questions (6) and interrogative exclamatives (7).

(4) Didn’t CJ go there yesterday too? BIASED QUESTION

(5) Lebo went there yesterday, didn’t she? TAG QUESTION

(6) Didn’t I tell you it would be easy?! RHETORICAL QUESTION

(7) Isn’t it wonderful! EXCLAMATIVE

Theoretically, these constructions are interesting because all are non-canonical questions that express some sort of bias towards a proposition *p* despite including markers of negation. There is intuitively a clear link between these constructions; however, the literature has considered them as two separate groups, with a relationship between biased questions and tag questions, and a separate relationship between rhetorical questions and interrogative exclamatives. There is thus a further question to be addressed in this thesis about the overarching relationship between all four constructions.

I will now give a brief overview of recent accounts of the four constructions in the literature as well as the role of intonation in questions, setting out the background for the positions that I will take in this thesis. This will be followed by a short roadmap of the thesis.

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<sup>2</sup>‘Scots’ can be a loaded term, due to differing opinions on whether it should be classed as a language, a dialect, a collection of dialects etc. Here, I use ‘Scots’ to refer to the varieties of English spoken across Scotland.



## 1.1 Non-canonical questions in the literature

### 1.1.1 Biased questions

The fact that negative polar questions (‘biased questions’) like (4) express bias was first observed by Ladd (1981). While these may superficially look like *negative* questions, biased questions indicate that the speaker has some existing belief of the *positive* proposition. The fact that the negation isn’t ‘real’ can be seen syntactically. One would expect negation to license negative polarity items (NPIs), such as *either* (Baker 1970, Horn 1989), but Ladd observed that it was possible for questions with ‘outer’ negation (e.g. ‘high’ negation, or reduced *-n’t* negation which attaches to the auxiliary and also inverts above the subject) to not ‘anti-license’ (Giannakidou 1997) positive polarity items such as *too*, which are generally repelled by negation. This is shown in (4), above. It is possible to have ‘true negative questions’, which do license NPIs, such as (8) – Ladd referred to these as ‘inner’ negation questions<sup>3</sup>.

(8) Can Emily not come to the party either?

However, while ‘inner’ negation polar questions are used in cases where the speaker is truly seeking information about the negative proposition underlying the question, ‘outer’ negation polar questions express a bias towards the proposition of the opposite polarity i.e. to *p*. In asking a question like (4), the speaker is somehow making clear to the addressee that they are *biased* toward the answer of the question being *p*.

A number of analyses have been proposed to account for this bias, both in terms of establishing its pragmatic distribution and in terms of the actual semantics of the question. In this thesis, I will follow the position of Sudo (2013), Domaneschi et al. (2017) and Gaertner and Gyuris (2017) in arguing from the pragmatic point of view that both the speaker’s *epistemic belief* and the *evidential context* surrounding the interaction are important in licensing biased questions<sup>4</sup>.

Following Sudo (2013), I use the term ‘epistemic belief’ here to signal the extant belief of the speaker when entering into the interaction where a non-canonical question will be used. I use ‘epistemic belief’ as I set aside the potential influence of prior deontic,

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<sup>3</sup>Ladd is primarily concerned with the idea that high *-n’t* negation can be both ‘outer’ and ‘inner’, leading to ‘Ladd’s ambiguity’. However, more recent experimental work from Sailor (2013) in US English and Domaneschi et al. (2017) in UK English has shown that Ladd’s ambiguity does not actually hold for most speakers. I thus set that aside.

<sup>4</sup>There is an alternative perspective presented in the literature by e.g. Northrup (2014), Trinh (2014) and Farkas and Roelofsen (2017) in which question bias can be accounted for purely through evidentiality. Where relevant in this thesis, I will argue against this perspective, positing that the interaction between the belief and the biases is crucial to understanding when and why speakers produce non-canonical questions.

bouletic or teleological biases held by the speaker, though I acknowledge that they may have their own effects; I will touch on these in chapter 5.

The ‘epistemic belief’ is some content that is part of the speaker’s set of beliefs which is not currently active in the Common Ground (CG), but which the speaker believes should be active in CG, whether through addition or reactivation. The epistemic belief may be objective (such as ‘*Hibs won the Scottish Cup in 2016*’) or it may be subjective (such as ‘*this cake is delicious*’) – either way, the person holding the belief of  $p$  is willing to take responsibility for it (Krifka 2014, Woods 2016)<sup>5</sup> and as such to be a source for it (Gunlogson 2003). People may, of course, have epistemic beliefs that they do not wish to make active in CG. However, for the purposes of this thesis, the ‘epistemic belief’ is the speaker’s particular existing belief of  $p$  that they wish to discuss with the addressee.

While beliefs have been reasonably well-defined in the literature, there have been few attempts to define what ‘evidence’ is in non-canonical questions, even from the purely evidential accounts (though, see section 4.2.2 for discussion of Northrup’s (2014) evidential base).

Here, I assume that evidence is something that conversation participants have *immediate* and *unproblematic* access to, and which is *public* – i.e., it is manifest to all discourse participants (Sperber and Wilson 1995). Sudo (2013) also takes this position. However, I believe there needs to be some further consideration to this definition. In principle, the evidence should be *objective*; however, given that the prior epistemic states of conversation participants inevitably vary, there will always be some degree of subjectivity to the strength of the evidence, even in examples which are fundamentally objective. Take example (9).

- (9) S believes that A bought a car recently. A mutual friend tells S that he saw A going into to a car showroom at the weekend. S says:

Didn’t she just get a new car?

Here, S believes  $p$  - ‘A bought a car recently’. This belief is objective. S is then confronted by some evidence: A was seen going into a car showroom at the weekend. This evidence is also objective. However, it is easy to imagine how the backgrounds of S and A can vary, and can subsequently affect the interpretation of the evidence produced by the friend.

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<sup>5</sup>Rather than stating the speaker believes  $p$  to be *true*, I follow Krifka (2014) and Woods (2016) in stating that the speaker is at least willing to take responsibility for  $p$  in the discourse. This allows for uncertainty, lying, bullshitting etc. However, for simplicity and for consistency with other relevant work, I will refer to this as a ‘belief’.

In a situation where both S and A are extremely wealthy businesswomen, the belief that A already owns a car does not necessarily preclude S from believing that A is shopping for a new car – she may well be buying a second. The fact that S believes A bought the car recently means that the evidence may be considered slight negative counterevidence to this prior belief – although the idea of A owning two cars is very much possible, why would she be shopping for another quite so soon? However, this evidence would not eliminate the possibility of S’s belief being true. The biased question is a possible response here, though there may be other preferred responses, such as a tag question like *She just got a new car, didn’t she?*

On the other hand, in a situation where both conversation participants are less than extremely wealthy, A’s going to a car showroom would be strong negative evidence challenging S’s belief that ‘A bought a car recently’. Why would she be looking at a second car, *especially* so soon after she had bought a first? Intuitively, the chances of producing the given biased question are higher in this version of the world, where S’s prior epistemic state leads them to judge the (identical) evidence as more negative than they would if they operated in a world where money was no object (see chapter 5 for more on the choice of biased questions and tag questions given evidential contexts).

While this is an extreme example of how discourse participants’ interpretations of contextual evidence can vary, the basic principles are more broadly applicable: individual speakers’ interpretations of contextual evidence will vary based on their background, culture and the assumptions about the world that they bring to the conversation. So, although evidence is in principle objective in question production, it can never truly be devolved from speaker perspective and interpretation.

Returning to the existing literature, looking at data from English and Japanese, Sudo (2013) posits a feature-based system, where different questions are licensed in different contexts based on the combination of beliefs and evidential biases. Evidential context can be either [+] or [-], [positive] or [negative]; for example, an evidential context in favour of  $p$  would be [+positive], while an evidential context with no evidence for or against  $p$  would be [-positive, -negative]. Beliefs are positive ( $p$ ), negative ( $\neg p$ ), or it is possible that a speaker can have no specific belief [ $\emptyset$ ].

Sudo makes claims about the distribution of interrogative forms in English and Japanese; Domaneschi et al. (2017) subsequently make use of a similar feature-based system in their experimental work investigating when speakers in English and German choose to produce different forms of matrix questions. Their work corroborated the claims of Sudo

(2013) about the distribution of biased questions in English. Their results are summarised in Table 1.1. This is what I take as my starting point for the analysis in this thesis.

	speaker belief		
	<b>p</b>	<b>neutral</b>	<b>¬p</b>
evidential bias	<b>p</b>	PPQ / <i>really?! PPQ</i>	<i>really?! PPQ</i>
	<b>neutral</b>	ONPQ	
	<b>¬p</b>	ONPQ <sup>6</sup>	INPQ

Table 1.1: Relationship between epistemic and evidential biases established in Domaneschi et al. (2017) for choice of matrix question produced in English and German.

Table 1.1 borrows terminology from Ladd (1981), who describes true negative questions as ‘inner negation’ polar questions (INPQs), such as (8), repeated here.

(10) Can Emily not come to the party either?

The other terminology that Domaneschi et al. take from Ladd (1981) is the idea of ‘outer negation’ polar questions (ONPQs). These correspond to matrix biased questions and have ‘high’ negation (e.g. in English, *–n’t* rather than *not*), such as (4). Domaneschi et al. then add positive polar questions (PPQs), which are polar questions with no negative markers (such as (1)), and *really?! positive polar questions* (*really?! PPQs*), which are positive polar questions preceded by *really?!*, expressing surprise. Blank squares were not tested as Domaneschi et al. argue that questions would not be used in these contexts (see chapter 7 for more discussion).

As summarised in Table 1.1, Domaneschi et al.’s production experiment showed that speakers had significant preferences as to which form of matrix question should be produced depending on the particular combination of prior belief and current evidential context that the participants had been given. Most relevant for the thesis at this point is the distribution of ONPQs, which are used when speakers already have a bias towards the answer of the question ( $p$ ), and there is either challenging counterevidence or simply no evidence in favour of  $p$ . I will refer to these as ‘(matrix) biased questions’ throughout this thesis.

While these ideas of beliefs and biases explain the distribution of the forms of interrogatives, the question of *how* biased questions express the idea that speaker believes  $p$  has led to some debate. Here, I will give a brief summary of the three main positions in the literature: a pragmatic analysis based on utility values (van Rooij and Šafářová

<sup>6</sup>Domaneschi et al. (2017) find that there is variation in the intonation used in ONPQs in this cell and suggest that there may be an INPQ variant here; however, they leave the details for future research.

2003), a semantic analysis centered on negation of the speech act (Krifka 2015) and the  $\neg$ VERUM (Romero and Han 2004) and FALSUM approaches (Repp 2009, Romero 2015). In this thesis I generally support the FALSUM analysis, which developed from the original  $\neg$ VERUM analysis: here, I explain briefly why I reject the two alternative analyses, and give a brief summary of Romero and Han (2004) and Romero (2015) – for more detailed discussion, see chapter 4.

van Rooij and Šafářová (2003) argue for a pragmatic account for question bias in which all polar interrogatives have the same denotation. Whether a positive polar question (*Does she like dogs?*), a negative polar question (*Does she not like dogs?*) or an alternative question (*Does she like dogs or cats?*) is used depends on the pragmatic purposes of the question, and which question would have the highest *utility value* given the context and the speaker’s expectations. In particular, ‘*the speaker prefers to ask that type of polar question for which the utility of the positive answer is higher or equal to that of its negative counterpart*’ (van Rooij and Šafářová 2003:301). Positive polar questions, then, are used where the speaker’s goal is to have  $p$  added to CG, as the positive answer (‘yes,  $p$ ’) is more useful in achieving the goal. The authors argue that alternative questions are used when the speaker has no bias towards  $p$  or  $\neg p$ <sup>7</sup>. For the purposes of this thesis, most interesting is their claim about negative polar questions: they argue that Ladd’s (1981) distinction between ‘outer’ and ‘inner’ negation should be forgotten and that both are cases where the negative proposition  $\neg p$  is either more informative, or the speaker believes that  $\neg p$  should hold (i.e. it is their goal). While van Rooij and Šafářová (2003) present a neat analysis, it does not account for the results in Domaneschi et al. (2017), where different positions of negation had different licensing contexts, nor the fact that true negative questions license NPIs while biased questions do not.

Krifka (2015) argues that the negation found in biased questions is a particular speech act operator, situated in a high NegP. This operator embeds a ForceP that hosts ASSERTION force, and is scoped over by a second ForceP which hosts REQUEST force. It is this REQUEST operator that licenses the interrogative word order; speech act level NegP is not accessible without the inclusion of this REQUEST operator. The high negation subsequently acts to ‘denegate’ the lower ASSERTION force, asking the addressee if it is not this assertion (i.e. is it some other assertion) that should be added to CG.

(11) S believes that there is a vegetarian restaurant nearby, but hasn’t seen it, and

---

<sup>7</sup>No bias in terms of their epistemic belief as to which should hold – this does not mean that a speaker is necessarily neutral in terms of their desire as to which proposition holds (van Rooij and Šafářová 2003). See Beltrama et al. (2018) for recent discussion of alternative questions and their licensing conditions.

wants to ask A whether their belief is correct.

[<sub>ForceP</sub> REQUEST [<sub>NegP</sub> is<sub>i</sub>n't [<sub>ForceP</sub> ASSERTION [<sub>TP</sub> there t<sub>i</sub> a vegetarian restaurant here]]]]

Krifka claims that this accounts for negation being syntactically high in biased questions, which is common cross-linguistically: Romero and Han (2004) give evidence from e.g. Bulgarian, Korean, German, Greek and Spanish. However, biased question negation is not necessarily distinctly high. For example, in Japanese, the position of negation is fixed regardless of whether the question has a biased or true negative meaning (Sudo 2013:12). The two meanings can only be forced by inclusion of PPIs for the biased question reading (e.g. *doko-ka* in (12)) or NPIs for the negative question reading (e.g. *dare-mo* in (13)).

(12) *Doko-ka oisii resutoran sir-anai?*  
 where-KA good restaurant know-NEG  
 ‘Don’t you know some good restaurant?’

(13) *Dare-mo hokani ko-nai?*  
 who-MO else come-NEG  
 ‘Is no-one else coming?’ (Japanese, Sudo 2013:14-15)

Perhaps in languages like Japanese, it could be argued that there is LF raising of negation to scope over the ASSERTION operator – however, syntactically, this does not then justify having a particular high negation position in the syntax. Furthermore, Romero and Han (2004:614) state that although there are differences in preposed vs non-preposed negation, it is not the case that this negation is correlated with a specific position; while they believe it to be in C for e.g. English and Bulgarian, they cite work that argues that in Spanish and Greek, the negation is lower than C (Suñer 1994, Alexiadou and Anagnostopoulou 1998). There does not, therefore, seem to be reason to argue for a specific syntactic ‘high negation’ position based on the cross-linguistic evidence.

Instead, in thesis I support the analysis that biased question negation is not-at-issue content (Romero (2015), building on Romero and Han (2004)). Romero and Han (2004) argue that the negation in a biased question scopes over a VERUM operator (Höhle 1992). VERUM is a conversational epistemic operator which, in Höhle’s original conception, is a particular kind of focus accent that does not focus the part of the proposition it sits on, but rather emphasises that the proposition as a whole is true (see Lohnstein (2016) and Gutzmann et al. (in press) for recent discussion on the semantics of VERUM).

(14) *Karl HAT den Hund gefüttert.*  
 Karl has.VERUM the dog fed

‘Karl HAS fed the dog’

(Lohnstein 2016:290)

In a biased question, Romero and Han (2004) argue that the VERUM operator is scoped over by the negative marker at LF; this construction is then scoped over by the Q marker.

(15) Isn’t Jane coming too?

LF: [<sub>CP</sub> Q not [ VERUM [<sub>IP</sub> Jane is coming too]]]

The speaker is thus asking whether they are correct in assuming that  $p$  is true and should definitely be added to the Common Ground.

Following criticisms of the  $\neg$ VERUM analysis from Romero (2006) and AnderBois (2011) (see chapter 4), Repp (2009) and Romero (2015) posit instead that the negation is not true negation, but a FALSUM marker. FALSUM is, in effect, the opposite end of a scale from VERUM and signals that the speaker *does not* believe  $p$  is true.

(16) [[FALSUM  $p$ ] = zero degrees of strength for adding  $p$  to the Common Ground

(Repp 2009:199)

In a biased question, then, the question operator scopes over FALSUM as well as the proposition, and asks whether it is the case that there are zero degrees of strength for adding  $p$  to CG.

(17) Isn’t Jane coming too?

LF: [<sub>CP</sub> Q [ FALSUM [<sub>IP</sub> Jane is coming too]]]

I will discuss the FALSUM analysis for biased questions in more detail in chapter 4.

In summary, biased questions have been shown to be interesting because they express bias towards an underlying proposition  $p$ , and thus have an unexpected relationship to polarity, as well as being licensed by a complex interaction between speaker beliefs and the evidential context. I move on to consider tag questions, often assumed to be closely related to biased questions.

### 1.1.2 Tag questions

Canonical tag questions<sup>8</sup> like (5), repeated below, are the second type of non-canonical question construction which will be considered in this thesis.

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<sup>8</sup>Following Sailor (2011), I refer to tag questions where the tag agrees with the anchor e.g. in terms of the auxiliary verb and the pronoun agreeing with the subject of the anchor as ‘(canonical) tag questions’. Most often, canonical tag questions are of the opposite polarity to their anchor (Tottie and Hoffman 2006); however, same polarity canonical tags are possible. I contrast the term canonical tag question with ‘invariant tag particles’: a category which includes various tag particles like *right*, *huh* and *eh*.

(18) Lebo went there yesterday, didn't she?

It is often claimed that tag questions are complex syntactic constructions, with the entire speech act expressed by the combination of the assertion in the 'anchor' proposition of the tag and the question in the tag. Syntactically, both Culicover (1992) and den Dikken (1995) posit movement analyses for tag questions, in which the anchor is raised above the tag. However, Sailor (2011) formalises the notion that the two clauses are in fact separate (suggested informally by e.g. van Rooij and Šafářová (2003), Reese and Asher (2006)). Under Sailor's account, the anchor of the tag is a regular assertion, while the tag is a biased question which has undergone VP-ellipsis due to the eGIVENNESS condition (Merchant 2001), which states that information can be elided if it is already given in the context.

The idea that tag questions express bias has been long noted in the literature (Sadock 1974, Millar and Brown 1979, Ladd 1981, Reese and Asher 2006, Malamud and Stephenson 2014), with the tag taken to do something like 'hedge', 'check' or 'reconfirm' (Ladd 1981) the proposition presented in the anchor of the tag. It is assumed that the speaker has a bias towards that proposition being true and so the tag, of the opposite polarity, relates to that bias.

In terms of how that bias is expressed in tag questions, in his syntactic analysis, Sailor (2011) posits that these tags are specifically VP-elided biased questions. Matching this, a number of accounts have added tag questions into their analysis of matrix biased questions. van Rooij and Šafářová (2003) mention tag questions as part of their utility value analysis; Krifka (2015) also accounts for tag questions in the same 'denegation of the assertion' analysis he poses for biased questions, and both Sailor (2011) and Malamud and Stephenson (2014) do not formalise a  $\neg$ VERUM analysis for tag questions but suggest this would be the correct direction to go in. I will take it for granted throughout this thesis that tag questions are VP-elided biased questions, and thus that they also have a FALSUM analysis<sup>9</sup>.

As well as the syntactic and semantic structure of the canonical tag question construction, the discourse purpose of tag questions has also been discussed in the literature (Reese and Asher 2006, Malamud and Stephenson 2014). It is this aspect of tag questions that I will focus on in this thesis. These works do not discuss the meaning of the individual parts of tag questions, but rather the overall impact of the constructions

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<sup>9</sup>Farkas and Roelofsen (2017) are an exception to this general rule that canonical tag questions are linked to biased questions in the literature; they posit a complex speech act analysis for tag questions but do not discuss matrix biased questions. I will discuss their analysis in detail in chapter 4.



on the discourse. Reese and Asher (2006) argue that reverse polarity tag questions produce ‘Acknowledgment’ and ‘Confirmation’ moves. Malamud and Stephenson (2014) discuss the impact of reverse polarity tag questions with rising intonation (as well as same polarity tag questions and rising declaratives) on a Table model of discourse (Farkas and Bruce 2010), invoking the idea that a speaker projects potential discourse commitments on behalf of themselves or the addressee. I discuss these analyses in detail in detail in chapter 4.

So, though tag questions may have additional purpose beyond information-seeking and expressing of bias, it is still assumed in the literature that they are closely related to biased questions – if not completely the same construction. I now turn to look at the positions the literature has taken on rhetorical questions and interrogative exclamatives – positions quite separate from biased questions and tag questions.

### 1.1.3 Rhetorical questions

Rhetorical questions like (6), repeated here, look on the surface to be regular interrogatives.

(19) Didn’t I tell you it would be easy?!

However, their purpose is assumed *not* to be information-seeking. Sadock (1974) claims that rhetorical questions semantically have the force of an assertion of the opposite polarity to their form. So, a rhetorical question like (6) would have the force of a positive assertion, indicating that the speaker *had* told the addressee that ‘it would be easy’. Han (2002) presents a semantic analysis to account for this ‘assertive force’.

However, more recently, there has been a shift away from this speech act analysis of rhetorical questions towards a more pragmatic analysis which retains their status as interrogatives semantically, as well as syntactically. Beginning with Rohde (2006) and followed by Caponigro and Sprouse (2007) and Biezma and Rawlins (2017), it has been shown that different types of interrogative constructions can serve as rhetorical questions (e.g. 20), and do not necessarily have to indicate opposite polarity assertions (e.g. 21).

(20) Are you doing a PhD or vacationing in Konstanz?! (Biezma and Rawlins 2017:303)

(21) It’s understandable that Luca adores Mina. After all, who helped him when he was in trouble?

(=‘Mina helped Luca when he was in trouble’)

(Caponigro and Sprouse 2007:124)

Although these examples are clearly not semantically equivalent to an assertion of the opposite polarity, the notion of ‘asserting’ has remained prevalent. Ginzburg (2012) argues that rhetorical questions are used to ‘restate’ something which is known to all conversation participants; similarly Biezma and Rawlins (2017) argue that rhetorical questions are non-inquisitive interrogatives in which the meaning is forced into CG via presupposition, and thus do not have to be answered, giving them an assertive flavour although they are still questions.

Rhetorical questions are thus assumed to strongly express a bias towards a particular proposition – however, perhaps because they are considered to be almost ‘beyond’ bias (as a statement or assertion), they have not generally been discussed in the same terms as matrix biased questions or tag questions. Biezma and Rawlins (2017) do claim that these interrogatives that express attitudes are from the ‘same family’, but do not claim that the bias arises in the same way. Their account of rhetorical questions assumes that the information is already in CG for all conversation participants, or forced through presupposition based on evidential context, rather than through any particular semantic mechanism such as VERUM or FALSUM.

Importantly also, accounts of rhetorical questions have attempted to group all rhetorical questions into the same analysis. I will discuss this in more detail in chapter 6; I now move on to discuss interrogative exclamatives in the literature.

#### 1.1.4 Interrogative exclamatives

Most discussion of exclamatives has focused on *wh*-exclamatives e.g. *How amazing that talk was!*, with polar interrogative type exclamatives (such as (7), repeated below) taken to be a side note, perhaps incorporated into the category of rhetorical questions (Zanuttini and Portner 2003, Delfitto and Fiorin 2014).

(22) Isn’t it wonderful!

The analyses that have been put forward for exclamatives have been varied: there have been those where the semantics of exclamatives come from a question which has had its domain widened to include an unexpected answer (e.g. Zanuttini and Portner 2003), and those where there is a specific degree mechanism responsible for the meaning (e.g. Rett 2011). Other analyses combine the two aspects: for example, Castroviejo Miró (2008), Wood (2014) and Taniguchi (2017) all combine question semantics with some form of degree modifier (e.g. POS, see discussion in Kennedy and McNally (2005)) or exclamative force modifier (e.g. Taniguchi’s EXCL). Despite the mixed opinions on how the degree/scalarity

interpretation should arise, all but Rett (2011) have treated exclamatives as underlyingly interrogative constructions with question semantics which have some additional semantic mechanism to provide the exclamative interpretation.

Exclamatives will not be discussed in as much depth as the other three constructions, but will be referred to throughout chapter 4 where necessary.

### 1.1.5 The role of intonation

In the previous four subsections, I focused on the fact that the four non-canonical questions investigated in this thesis have the same syntax as regular interrogatives in English. However, as noted in the first paragraph, there is also a regular intonation contour associated with English polar interrogatives – rising intonation. It is therefore worth noting that the prosodic qualities of the four non-canonical questions presented here have been reported to vary from this. Most substantially, work has been carried out into the intonation contours of rhetorical questions (Quirk et al. 1985, Banuazizi and Creswell 1999, Bartels 1999, Dehé 2017). Dehé (2017) shows that a complex interaction of contours, accent placement, duration and voice quality appear to signal rhetorical questions in English, contrasting with the signals for information-seeking questions.

Intonation has also played an important role in discussion of the properties of tag questions. Ladd (1981) claims that there are ‘nuclear’ tag questions, those where the tag has a separate nucleus to its anchor, and ‘post-nuclear’ tag questions, where the tag is incorporated into the same intonation contour as its anchor. He furthermore claims that post-nuclear tags rise while nuclear tags fall; Reese and Asher (2006) argue that while post-nuclear tags always rise, nuclear tags can either rise or fall. Furthermore, Dehé and Braun (2013) present a corpus study showing that falling intonation is the most common type in reverse polarity tag questions. Tag questions, therefore, do not always have the rising contour predicted of regular interrogatives.

Intonation contours are less frequently discussed for biased questions or interrogative exclamatives. Domaneschi et al. (2017) find that there may be some variation in intonation patterns for biased questions in situations where the speaker is being challenged by some counterevidence – however, they do not investigate this in any more detail. Interrogative exclamatives do not have regular rising intonation, and are generally posited to have falling intonation (Clark and Lindsey 1990, Taniguchi 2017)<sup>10</sup>.

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<sup>10</sup>There may well be other properties involved in the prosodic marking of interrogative exclamatives – further work along the lines of Dehé’s (2017) in-depth work on the intonation of rhetorical questions would be beneficial.

Regarding the meaning of the various prosodic patterns found in these non-canonical questions, there have been three main ways of dealing with this in the literature. Firstly, there have been accounts in which the intonation has been incorporated into the overall meaning of the construction – for example, Reese and Asher (2006), who consider the varying intonation patterns of tag questions in order to make claims about their meanings as whole units. Secondly, the idea that rising intonation adds some sort of ‘questioning’ speech act to a construction has been a popular theory (Pierrehumbert and Hirschberg 1990, Truckenbrodt 2015, Farkas and Roelofsen 2017), primarily based on evidence from rising declaratives, which appear to take on an interrogative meaning purely due to the addition of rising intonation. Finally, Gunlogson (2008) argues that rising intonation has a more pragmatic meaning, that of *contingency*, defined as follows:

‘A discourse move  $\mu$  by an agent  $\alpha$  is contingent on a discourse condition  $\delta$  if:

- (a)  $\delta$  does not obtain at the time of  $\mu$ ; and
- (b) It is inferrable from the discourse context that the update effected by  $\mu$  is to be retained only if  $\delta$  obtains after the discourse move immediately succeeding  $\mu$ .

(Gunlogson 2008:129)

So, in a rising declarative, the acceptance of  $p$  (the proposition in the declarative) to CG will only happen if the addressee is able to be an ‘independent source’ for the proposition – and thus to take responsibility for it. Gunlogson (2008) argues this accounts for the distribution of rising declaratives, which are used when the speaker has some weak evidence to suggest that  $p$  is true, but is aware that the addressee is in a position of authority with regards to the topic, such as (23).

- (23) Robin is sitting in a windowless computer room when another person enters. The newcomer is wearing a wet raincoat and boots. Robin says to the newcomer:  
It’s raining?

It is this meaning of contingency I will apply to the rising intonation on non-canonical questions in this thesis. Throughout, I will make arguments in favour of this point, particularly over the speech act analysis.

## 1.2 Questions at hand and roadmap

As previously mentioned, this thesis will investigate a number of questions at the syntax/pragmatics interface by carrying out a detailed investigation into the particles *-int* in Glasgow Scots and *-n* in Shetland dialect.

(24) They've left, **hint** they? (Glasgow, Thoms et al. 2013)

(25) *Is'n shö a boanny ting?*  
is.N she a pretty thing  
'Isn't she pretty?'

(Shetland, Robertson and Graham 1952:10)

In order to address the overarching questions about the role of evidence and belief in discourse, and about discourse in syntax, it will firstly be crucial to establish the distribution of *-int* and *-n*, only briefly mentioned in the literature so far. In chapter 2, I introduce the two varieties in more detail before giving a brief overview of the literature on the complexities of negation in Scots, and of questions in Scots. I then develop an extension to the 'interview method' for dialect syntax (Cornips and Poletto 2005, Barbiers and Bennis 2007, Thoms 2014) that I use as the methodology for gathering data on the two particles. As part of this, I discuss how best to interpret acceptability judgment data in non-standard varieties, and posit an extension of hyperdialectalism (Labov 1972b, Trudgill 1986, Wolfram and Schilling-Estes 1995, 2006, Britain and Fox 2009) to the perceptual domain in Shetland, improving our ability to interpret acceptability judgment data, and shedding further light on linguistic change in Shetland.

In chapter 3 I present quantitative and qualitative results from the data collection process in order to establish the distribution of *-int* and *-n*, taking the information from chapter 2 into account. I show that *-int* and *-n* are each restricted to a set of non-canonical question constructions: *-int* in tag questions with some contextual preferences; polar exclamatives, and rhetorical questions, and *-n* in the same constructions, with evidence of some acceptability in matrix biased questions but with ongoing loss.

Having established the distribution of the particles, in chapter 4 I turn to an analysis of the particles, addressing pragmatic, semantic and syntactic questions about the encoding of beliefs and evidence in discourse. Firstly, I establish the specifics of the pragmatic conditions that link the three contexts that can license the *-int* and *-n* particles, arguing that there is an important role for the relationship between the speaker and addressee. I

thus build links between all four non-canonical questions with negation in standard English discussed above, but show where the Scots particles could develop separate functions. I then provide a semantic and syntactic analysis for the particles, arguing that despite their surface appearance – very much like negation markers – they are *not* negation, nor are they markers of specific biased question negation such as *FALSUM* (Romero 2015). Instead, I argue that these particles have been reanalysed as *CHECK* markers, extending the interactional semantic framework of Ginzburg (2012). Syntactically, having argued that these particles are a sort of discourse marker, I address the question of discourse in the syntax. I build on the work of e.g. Speas and Tenny (2003), Haegeman and Hill (2013) and Wiltschko and Heim (2016) who posit various neo-performative syntactic projections above CP. Specifically, I argue *-n* and *-int* trigger head movement to this discourse domain, providing further evidence that discourse particles should be treated as part of the syntax.

Throughout chapter 4, I make comparisons with relevant analyses for standard English constructions to show both where the Scots data diverges, and how standard English can also be accounted for in this framework. In chapters 5 and 6, I move on to consider standard English more closely, as the Scots data makes links between all four non-canonical questions constructions discussed at the beginning, and raises questions about assumptions that have been made in the literature.

Firstly, recent literature has shown cross-linguistically that speakers choose to use different forms of matrix interrogatives depending on their epistemic beliefs and the evidential context surrounding the interaction. Furthermore, it has also been shown cross-linguistically that speakers use different forms of tag questions depending on their epistemic beliefs and the evidential context surrounding the interaction. Matrix biased questions and tag questions are argued to be available in the same contexts in English, as detailed in sections 1.1.1 and 1.1.2 – however there has not, to date, been any experimental work to establish whether the contexts which permit both types of construction exhibit a preference as to which construction should be used. Given the within-construction variation seen, and the ongoing change evidence in the Shetland data, we might expect there to be preference by evidential context.

In chapter 5 I present a forced-choice task in order to test this question in both English and German. I show that the English results fall out from the analysis for canonical English tag questions that I set out in chapter 4, and is preferable to the analyses of Northrup (2014) or Malamud and Stephenson (2014). Based on a comparison of the results between English and German, I briefly hypothesize based on the results that cross-

linguistically, beliefs and biases operate in a scalar fashion with regard to *strength* of belief<sup>11</sup>, and consider a special role for beliefs beyond the epistemic (e.g. bouletic or deontic beliefs).

In chapter 6, I move away from biased questions and tag questions to focus on rhetorical questions. Shetland dialect *-n* and Glasgow Scots *-int* are available in polar rhetorical questions, but not in rhetorical *wh*-questions. While both are clearly non-canonical questions of sorts, this causes problems for standard analyses of rhetorical questions, which treat polar and *wh*- rhetorical questions as being amenable to the same analysis. In chapter 6 I therefore turn to address the relationship between polar and *wh*-rhetorical questions and how these meanings are encoded semantically and syntactically. I firstly argue that polar rhetorical questions can be understood in the same sort of belief and bias model as biased questions, and in effect ‘fill in the blanks’ in the table presented by Domaneschi et al. (2017) (Table 1.1). I show that rhetoricalness in *wh*-questions cannot be expressed in the same way. This solidifies the relationship between the non-canonical question constructions posited above, and speaks to the broader question of how bias in interrogatives is expressed.

I then present evidence that there are at least two types of rhetorical *wh*-question, one in which there is a known value for the *wh*-word in CG, and one which is a more ‘traditional’ rhetorical question that I argue has a ‘generic’ element to its interpretation. I build on Kotek’s (2016) semantics for *wh*-questions in order to account for these two types of rhetorical *wh*-question.

Chapter 7 draws together discussion from chapters 3-6 and concludes.

Overall, then, throughout this thesis I develop ways to grammatically encode features of discourse in both syntax and semantics, based on detailed empirical work of two understudied varieties, as well as investigation into standard English. I also present arguments for developing a cohesive theory of polar interrogatives, built on a combination of speaker beliefs, evidential contexts, and speaker perception of addressee beliefs, extending recent work from Sudo (2013), Domaneschi et al. (2017) and Gaertner and Gyuris (2017).

There are some notable aspects of the topics at hand that I do not cover in this thesis. Firstly, one of the most striking properties of interrogatives in Scots is that there is no specific form for biased questions. Both biased questions and true negative questions

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<sup>11</sup>A similar idea regarding strength or *credence* of belief is put forward by Farkas and Roelofsen (2017); however, Farkas and Roelofsen model their entire system of question bias on the strength of epistemic belief alone. The results of my research support a model of question production that incorporates both epistemic belief and evidential bias, such as Sudo (2013) and Gaertner and Gyuris (2017).

are formed with low negation, as opposed to standard English, where there is a distinction between high *-n't* negation (biased questions) and verb-subject-*not* constructions (true negative questions) (see section 2.3.2). I do not consider in any detail why Scots diverged from English in this way – in part because there is not enough historical data available in Scots. I also do not discuss in any great detail why standard reduced negation *-na* in Scots does not appear to be able to raise in questions while *-n't* can in standard English. See Weir (2007) and Thoms et al. (2013) for some theoretical discussion on this topic.

Finally, I do not make any significant arguments as to what the negation in non-canonical questions is, outside of the Scots context. For the most part, I follow Romero (2015) in arguing that negation in biased questions is not regular semantic negation, but *FALSUM*, as discussed above.



## Chapter 2

# Scots Data and Methodology

### 2.1 Introduction

The primary data used to address the major questions presented at the beginning of this thesis comes from non-canonical questions with ‘negation’ in two varieties of Scots: Glasgow Scots and the Shetland dialect of Scots. In this chapter, I will firstly (in section 2.3) give a brief overview of the two communities in question. The non-canonical questions at hand have been shown to have complex relationships to negation; negation in Scots is in general a complex phenomenon, and so I will then outline what we know about negation in Scots, focusing on negation in interrogatives and particularly on Glasgow Scots and Shetland dialect – as well as touching on declaratives, imperatives and variation in negation across other areas of Scotland and the UK.

In section 2.4 I move on to introduce the methodology I use by firstly giving an outline of how traditional grammaticality judgment tasks have been adapted and refined in previous studies in order to investigate dialect syntax. I then outline a handful of relevant experiments in laboratory pragmatics that have investigated both the pragmatic and prosodic conditions required for insight into non-canonical questions. In section 2.4.2 I detail how I combined these two types of methodology, incorporating insights from experimental pragmatics into the ‘interview method’ for dialect syntax in order to investigate non-canonical question constructions in these varieties.

Finally in section 2.5, I consider the sociolinguistic contexts in which the judgments were given, and how these issues of linguistic change and identity influence how speakers carry out acceptability judgment tasks. This will appropriately arm us to interpret the quantitative results presented in chapter 3.

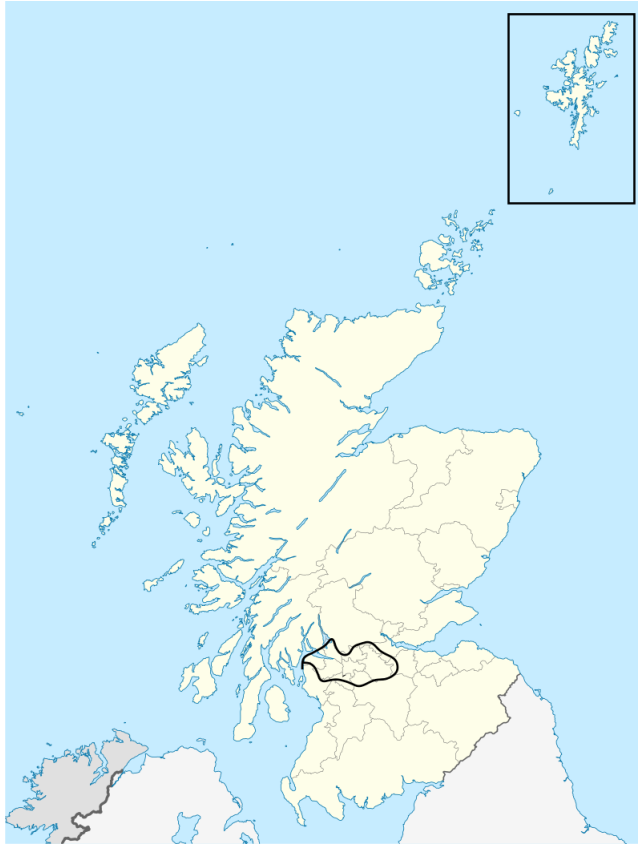


Figure 2.1: Map of Scotland highlighting the locations of the Shetland Islands and of the Greater Glasgow area. ©NordNordWest / Wikimedia Commons / CC-BY-SA-3.0

## 2.2 Glasgow and Shetland

The data for this thesis comes from two very different communities in Scotland. Situated on the central west coast, the Greater Glasgow area has an approximate population of 1.2 million (Census 2011) and is the largest urban area in Scotland. By comparison, the Shetland Islands are the most northerly region of Scotland, 200 miles north of Aberdeen, with a population of just 23,000 (Shetland in Statistics 2013:9).

Two rather distinct varieties of Scots are spoken in these areas. For details of features of Glasgow Scots, see e.g. Macafee (1983, 1994), Stuart-Smith (1999), Macaulay (2006), Stuart-Smith et al. (2006, 2007), Thoms et al. (2013), Childs (2017). For features of Shetland dialect, see e.g. Robertson and Graham (1952), Melchers (1997), Pavlenko (1997), van Leyden (2004), Sundkvist (2007), Smith and Durham (2011, 2012), Durham (2013), Jamieson (2015). While each variety has a wide range of distinctive linguistic features, relevant for this research are two small particles: *-int* in Glasgow Scots, and *-n* in Shetland dialect.

(26) **Wint** it just a cracker of a day! (Glasgow, Thoms et al. 2013:19)

(27) *Tammy, isn yun Jeannie o Maanwil's lass at's gotten mairied*  
Tammy is.N that Jeannie of Maanwil's daughter that's got married  
*dis week?*  
this week

‘Tammy, isn’t that Jeannie of Maanwil’s daughter who has got married this week?’

(Shetland, Tait 1973:13)

Before we consider these negative-looking particles in detail, it is first necessary to establish the general patterns of negation seen across Scots (and other non-standard English) varieties and thus to situate these particles in their wider context.

## 2.3 Negation in Scots

### 2.3.1 Declaratives and imperatives

#### Negative declaratives and negative concord

Sentential negation in standard English can be expressed in two different ways: either with a full negative marker, *not*, as in (28), or with a contracted negative marker, *-n’t*, as in (29). The *auxiliary* may or may not be contracted in cases like (28) (Brown and Millar 1980, Tagliamonte and Smith 2002, Yaeger-Dror et al. 2002, Varela Pérez 2013). Prevalence of auxiliary contraction is associated with speech style, stance and dialect – however, it is not relevant for the later discussion of interrogatives and so I will not discuss it any further here.

(28) Andre will **not** like it.

(29) Hema won**’t** like it.

There is some debate in the literature as to whether the reduced negation form *-n’t* in the present day is a clitic or an affix (Zwicky and Pullum 1983, Thoms et al. 2013). I take no position in this debate, and will refer to the *-n’t* particle as ‘reduced’ or ‘contracted’ negation throughout.

There is phonological variation across varieties of English with respect to the negative markers: for example, in Yorkshire, loss of [n] following a vowel (30) is commonly attested; while glottalising or omitting the final [t] is common across English varieties (Anderwald 2002).

(30) They sell electrical goods but they [do:t] repair them.

(Yorkshire, Steele and Whisker 2007)

The forms of negation markers in Scots varieties clearly diverge from standard English. General descriptive accounts of Scots often claim that *no* [no] is the standalone negation particle corresponding to standard English *not* (Brown and Millar 1980, Anderwald 2002). Indeed, *no* as the independent negative marker appears to be available in all Scots-speaking areas except the north east (e.g. Aberdeenshire), where the standalone negator is *nae* [neɪ] (McClure 2002, Macafee 2011). In both of the varieties investigated in this thesis, Glasgow Scots (Thoms et al. 2013) and Shetland dialect (Robertson and Graham 1952), the standalone negative marker is *no* [no].

(31) I've no left yet.

(Scots, Thoms et al. 2013:3)

(32) *He'll no ken at du's here.*  
he'll NEG know that you.SG're here  
'He'll not know that you're here.'

(Shetland, Graham 1993:58)

This *no* is not constituent negation (see Thoms et al. (2013) for arguments relating to its ability to be syntactically very high, its potential for variation in scope-taking with *because* adjuncts, and NPI licensing properties), and can co-occur with constituent negation (also realised as *no* in both Glasgow Scots and Shetland dialect).

(33) He should NO no go.

(Scots, Thoms et al. 2013)

While *no* as a standalone negative marker is the most common variant across Scots varieties and is the same in both of the varieties investigated in this thesis, the reduced negative form varies more substantially. *-nae* [neɪ] is probably the most well-known, as the variant used in east central and south east coast Scots (Brown and Millar 1980) as well as in central west coast varieties (Macaulay 1991, Aitken, cf. Macafee 2011:2). In the north east and northern isles, *-na* [nə] is the common reduced form negation, though there are localised instances of [nu] found in Shetland too (Stadler et al. 2016). I will represent the standard reduced negative marker in Glasgow Scots, therefore, as *-nae*, and the reduced negative marker in Shetland dialect as *-na*. This appears to be a purely phonological difference, and does not have any bearing on any syntactic or semantic properties of the marker<sup>12</sup>.

<sup>12</sup>Until approximately the late 20<sup>th</sup> century, V-to-I movement in Shetland dialect meant that *-na* could attach to main verbs, with examples such as *kenna* ('know not'), *sawna* ('saw not') and *caresna* ('cares not') attested in dialect literature printed in *The New Shetlander* magazine. V-to-I has been all but lost from the dialect (Jonas 2002, Jamieson 2015) and does not require any further discussion here.

(34) He **didnae** like it. (Glasgow, Thoms et al. 2013:1)

(35) *I dunna kaen fu hit began, really.*  
I do.NEG know how it began really  
'I don't know how it began, really.' (Shetland, Cumming 2010:1)

The final point worth noting about negative declaratives in Scots is the potential for negative concord, in which multiple negative markers in a sentence yield a single semantic negation. While standard English generally does not exhibit negative concord, concord is considered to be somewhat of a 'vernacular universal' (Trudgill 1999, Hope 2000, Chambers 2004) across non-standard varieties of English, in various forms (Smith 2001, Howe 2005, Blanchette 2015). Smith (2001) describes six different kinds of negative concord, varying in frequency of availability (with levels of use depending on various sociolinguistic factors (Cheshire et al. 1993, Beal and Corrigan 2005, Smith and Holmes-Elliott 2014)). The most common is 'object negative concord' (Blanchette 2015), in which a negative indeterminate object (e.g. *nothing*) follows a negated verb (e.g. 36).

(36) I **don't** know **nothing** about that.  
= *I don't know anything about that*  
(Appalachian English, Blanchette 2015:15)

The other common form is 'subject negative concord' (Blanchette 2015), in which a negative indeterminate object (e.g. *nobody*) precedes a negated verb (e.g. 37).

(37) **Nobody** **don't** know where it's at.  
= *Nobody knows where it's at*  
(African American English, Labov 1972a:786)

In some varieties, it is possible for negative concord to extend to either a verb or indeterminate in a subordinate clause (Baugh 1983, Smith 2001, Howe 2005). There are also negative inversion structures, in which subject-auxiliary inversion of a negated verb takes place over a negative subject for emphatic purposes. These constructions are attested in African American English, Appalachian English and Alabama English (Labov 1972b, Feagin 1979, Smith 2001, White-Sustaita 2010).

Scots varieties are reported to exhibit the potential for negative concord (Macaulay 1991, Cheshire et al. 1993, Smith 2001, Anderwald 2002, 2005, Macafee 2011, Smith and Holmes-Elliott 2014, Thoms et al. 2017). As only *object* negative concord has been attested

in UK varieties<sup>13</sup>, it is only object negative concord I will discuss.

The most detailed work on negative concord in a dialect of Scots has been carried out in Buckie, in the north east. Smith (2001) finds approximately 60% negative concord while Smith and Holmes-Elliott (2014) report a total of 42.6% negative concord.

(38) We was **na** wanting **nothing** fancy.

(Buckie, Smith and Holmes-Elliott 2014)

Compared to Buckie, production rates for Glasgow are extremely low: Childs only finds 8% production rates in her corpus of Glasgow Scots (Childs 2017). The Scots Syntax Atlas project (Gary Thoms, p.c.) also finds little acceptability of object negative concord (using the example ‘I cannae see nothing’) in Glasgow Scots. The comparative acceptability rates for the same construction in north east mainland Scotland (around Buckie) are much higher. Notably, the atlas also finds that acceptability rates for the same negative concord construction in Shetland dialect are comparable to the north east. However, for a further variant of negative concord, ‘I didna see it nowhere’, Shetland dialect appears to diverge from the north east regarding the acceptability: *nowhere* is not acceptable as a negative indeterminate in concord in Shetland dialect, while it is in Buckie. Thoms et al. (2017) argue that negative concord can be restricted to specific indeterminates: we can thus conclude that while no indeterminates permit negative concord in Glasgow Scots, concord is restricted to *nothing* in Shetland dialect and more freely available with e.g. *nowhere* in Buckie.

The potential for negative concord is thus variable between the locations investigated in this research. In Glasgow Scots, negative concord is not widely acceptable<sup>14</sup>; in Shetland dialect, it is acceptable in object negative concord with *nothing*, but seemingly not as broadly acceptable as in varieties in north east Scotland. The limited availability of negative concord in both varieties will be relevant later in the thesis in discussion particular instances of non-canonical questions.

### Negative imperatives

Negative imperatives in present-day standard English are generally formed with *don't* at the beginning of the clause (39). Subjects are optional, but must immediately follow this

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<sup>13</sup>Thoms et al. (2017) point out that Buckie and north east varieties permit extension of negative concord to an indeterminate in a subordinate clause as long as it is a neg-raising predicate such as *think*. This is still object negative concord, without locality restrictions.

<sup>14</sup>Though Thoms et al. (2017) do discuss the possibility for negative concord in Glasgow with ‘semi-negatives’ (Zeijlstra 2004:39) like *hardly* and ‘squattives’ (Horn 2001) like *fuck all*.

negated *do* (40). Imperatives in standard English can also be produced with *do* and an unreduced form of negation, *not* (41). In that case, subjects are not permitted in any position.

(39) Don't touch that dial!

(40) Don't you forget! (Potsdam 2007:253)

(41) Do not (\*you) desert me! (Rupp 2007:19)

In general, negative imperatives in Scots varieties operate very similarly to their standard English counterparts. East coast, north eastern and insular dialects of Scots use their relevant *dinnae* (east/central) or *dunna* (north/insular) form to produce an imperative. Subjects behave as they do in standard English imperatives (42). However, independent negative marker *no* cannot appear in negative imperatives (43).

(42) Dinnae (you) smoke in here! (Fife, Weir 2012:1)

(43) \*Dae no smoke in here! (Fife, Weir 2012:9)

While the examples given here are from Fife, the same system applies in Shetland dialect, with the relevant phonological differences (*dunna*, rather than *dinnae*). Glasgow Scots has an accidental gap where the variety would be expected to have *dinnae* (Thoms et al. 2013) – although *dinnae* should be the negative form of *do*, and would be e.g. phonologically and morphologically licit, the variety simply does not have it. This ‘*dinnae* gap’ means that regardless of the construction type, where other varieties have *dinnae*, Glasgow Scots speakers fill this gap via circumlocution, or use the standard English *don't* in its place<sup>15</sup> – however, this is not particular to imperatives and should not be taken to be a meaningful syntactic distinction between Glasgow Scots and other varieties of Scots.

Syntactically, it appears that whatever analysis one wishes to give standard English imperatives, whether that is a subject-auxiliary inversion analysis (Potsdam 1998, Thoms et al. 2013) or an analysis in which there is a specific high imperative projection such as a JussiveP (Zanuttini 2008, Weir 2012), the analysis will extend to Scots varieties.

In both negative declaratives and negative imperatives, then, the systems of negation in Scots appear to be very similar to standard English in terms of their syntax and semantics, with some phonological variation. While there are some small variations in the systems which require further explanation (e.g. negative concord, or the

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<sup>15</sup>An alternative negative imperative strategy in Glasgow Scots is to use the exhortative particle *gonnae* with a lower negation, *no* (Weir 2012, Sailor and Thoms 2018), such as *gonnae no dae that*.

ungrammaticality of *do no* in Scots imperatives), as a whole, there is little variation to worry about here. The story is rather different for interrogatives.

### 2.3.2 Interrogatives with negation

In standard English, there are two way to form a matrix negative interrogative, as was detailed in chapter 1.

(44) Can Emily **not** come to the party?

(45) **Can't** Emily come to the party?

As explained in chapter 1, each of these forms has been shown to be preferred in specific pragmatic contexts based on whether the speaker has a prior belief about the truth of the proposition *p*, and the nature of the evidential context surrounding the interaction (Domaneschi et al. 2017). There appears to be some dialectal variation to this distinction. Tagliamonte and Smith (2002) find that *-n't* is categorical (e.g. (45)) in Tiverton and Henfield, in the south of England – presumably, therefore, exhibiting Ladd's ambiguity<sup>16</sup>. In their northern English locations (York and Maryport), speakers had a mix of low and high negation questions. Tagliamonte and Smith do not discuss how these question forms line up with speaker beliefs and evidential biases in context, but it is notable that both are available.

However, from Newcastle (Beal 1993:199) and further north across Scotland (and Ulster) (Brown and Millar 1980, Aitken 1984, Tagliamonte and Smith 2002), only questions like (44) are available in information-seeking questions. While in English varieties, *-n't* negation can invert over the subject in a question, it is not possible for *-nae* or *-na* to invert in Scots varieties (Millar and Brown 1979, Brown and Millar 1980, Thoms et al. 2013).

(46) Is he no coming?

(47) \*Isnae he coming? (Millar and Brown 1979:29)

This means that both true negative questions and matrix biased questions are expressed in the same way across Scots varieties, with a seemingly 'low' negation marker

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<sup>16</sup>However, the participants in Domaneschi et al. (2017) are also in the south of England, London to be precise. There may be an age-based aspect to the variation, in this case; equally, it may be that the students in Domaneschi et al. (2017) spoke varieties of English from outside of the south of England. The fact that there may be greater instances of Ladd's ambiguity in the south of England is worth investigating, but will not impact on the results of this thesis and so I will not discuss this any further.



*no*, and the only noticeable syntactic distinction in the availability of NPI or PPI licensing.

(48) Is he no coming either? TRUE NEGATIVE QUESTION

(49) Is he no coming too? BIASED QUESTION

The fact that biased questions in Scots varieties are not clearly distinct from true negative questions syntactically is a further challenge to the idea that cross-linguistically, ‘high’ negation can be clearly distinguished from ‘low’ negation due to its position in the syntactic structure (Romero and Han 2004, Krifka 2015, Domaneschi et al. 2017).

Inverted *-na(e)* is also unavailable in tag questions. Tag questions on positive anchors in standard English are most commonly *-n’t* constructions (50), with verb-subject-*not* tag questions never produced in the data in Tagliamonte and Smith (2002) and not discussed by Tottie and Hoffman (2006) in their corpus study. Verb-subject-*not* tags are perhaps considered to be acceptable but ‘somewhat stilted’ in standard English, and there are rare attestations (e.g. (51)) (Bender 2001:73).

(50) You’ve seen California, haven’t you? (US English, Tottie and Hoffman 2006:292)

(51) Bob left today, did he not? (US English, Bender 2001:74)

However, in Scots varieties, again *-na(e)* cannot invert (53). This means that verb-subject-*no* tags are in fact the norm in Scots (52), not the stilted forms found in standard English (though see further discussion in section 2.3.2, below).

(52) She’s his sister, is she no?

(53) \*She’s his sister, isnae she? (Edinburgh, Brown and Millar 1980:118)

The inability to invert reduced negation markers above the subject appears to be the state of affairs across Scots dialects in all interrogative constructions – though Brown and Millar (1980) claim that ‘some rural dialects’ can invert the *-na(e)* form. Robertson and Graham (1952) give an example of this inversion in Shetland dialect (54), and it is found in dialect literature in the 20<sup>th</sup> century. However, as a speaker of the dialect in the present day, I would find this unacceptable<sup>17</sup>.

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<sup>17</sup>It may possibly still be available for some older speakers of the dialect; however, I do not investigate constructions like (54) in this thesis.

- (54) *Couldna du a wun ower?*  
 could.NEG you.SG have managed to get over  
 ‘Couldn’t you have managed to get over?’

(Robertson and Graham 1952:10)

Dieth’s unpublished notes on the grammar of the Buchan dialect (from the late nineteenth century), cited in McClure (2002) also give an example of this inversion – however, there are no examples of this inversion in Jennifer Smith’s (p.c.) recent corpus of the Buckie dialect, a neighbouring region of north east Scotland. I thus set this aside.

However, although questions with negation in Scots are generally formed by the verb-subject-*no* construction, as I will refer to it, it appears that certain varieties of Scots have innovated particles that are used in interrogative constructions that use negation in standard English – namely, the four non-canonical question constructions that I highlighted in the introduction. I will give a very brief summary of particles found outside of the two locations of prime interest for this thesis, before giving a more in-depth overview of what the literature tells us about Glasgow Scots *-int* and Shetland dialect *-n*.

#### *-n’t, e and e no*

As we saw above, *-na(e)* is unable to invert in interrogative constructions in Scots varieties, while in standard English *-n’t* inverts frequently, depending on the type of construction (e.g. more often in tag questions) and the relationship to epistemic beliefs and evidential biases in matrix questions (Domaneschi et al. 2017). Despite not being the standard negation marker, *-n’t* also has a role in Scots varieties (Millar and Brown 1979) in non-canonical questions (Tagliamonte and Smith 2002).

- (55) Dainty, **isn’t** she? **Isn’t** she dainty? Dainty, look at her. Look at the feet all  
 crossed and all, eh? (Buckie, Tagliamonte and Smith 2002:265)

Tagliamonte and Smith (2002) find that *-n’t* is the negative marker used in ‘rhetorical questions’ that do not necessitate an answer across the three Scots varieties they investigate (Buckie, Cumnock and Cullybackey, an Ulster Scots variety) – both matrix and tag. Millar and Brown (1979) and Brown and Millar (1980) also attest interrogative *-n’t* in Edinburgh in tag questions and ‘confirmational’ matrix questions. Although *-n’t* is not the declarative or imperative negative form, then, it is a form which can be used in certain non-canonical questions in Scots.

Interestingly, while reverse polarity tag questions are by far the most common in standard English, *-n’t* is also reported to be available in tag questions on negative anchors

in Scots – at least in Edinburgh (Millar and Brown 1979). However, *-n't* must be combined with a lower negative marker, *no*. These tags are semantically equivalent to positive tags, according to Millar and Brown (1979:33).

(56) Your name's no Willie, isn't it **no**?

= *Your name's not Willie, is it?*

(57) He wouldnae do it, wouldn't he **no**?

= *He wouldn't do it, would he?*

(Edinburgh, Millar and Brown 1979:30)

The availability of these tags across other Scots varieties is not discussed in the literature; however, they are noted to be available in Newcastle and Tyneside (58), in 'confirmation' contexts only (Beal 1993:201).

(58) She can't come, can't she not? (Tyneside, McDonald and Beal 1987:1987)

Recall that Beal (1993) also found that *-n't* was not used in information-seeking questions in Newcastle, just as across Scots varieties. This ability for *-n't* to combine with a lower negative marker and be 'cancelled out' appears to be exclusively a property of these northern English and Scots varieties which do not have *-n't* in information-seeking questions, but can in 'confirmational' or 'rhetorical' contexts.

On the east coast, in Fife and Edinburgh, tags can be formed with the invariant particles *e* and *e no*. However, there is some disagreement in the literature about how these tags interact with the polarity of the main clauses. Millar and Brown (1979:32) claim that the tags are polarity matching, with *e* on positive statements and *e no* on negative ones. Thoms et al. (2013) claim the opposite, stating *e* is available on negative anchor clauses while *e no* is attached to affirmative clauses. The informants cited in Miller (1990) do not distinguish between *e* and *e no* in tag contexts; he therefore reports that both can be used on either positive or negative anchors and gives evidence of both (e.g. (59)-(62)).

(59) that cannae be right, eh?

(60) no it was chemistry they kept giving us all the silly formulas eh?

(61) the dog's no really angry, eh no?

(62) you're taking me to the pictures, eh no?

(all Edinburgh, Miller 1990:5)

It is also worth noting that *e* can be fronted to form a matrix interrogative (63); *e no* is claimed not to be able to by Millar and Brown (1979), but in fact, this is attested in the Dictionary of the Scots Language (64).

(63) E you've got a new bike? (Edinburgh, Millar and Brown 1979:32)

(64) Eh no I'm a good boy mummy?  
(Edinburgh, <http://www.dsl.ac.uk/entry/snd/sndns1370>)

The east coast *e* and *e no* particles, therefore, seem to be another way that Scots speakers have innovated alternative strategies to express some sort of bias in interrogative constructions. Further work on their pragmatic distribution and their semantic contribution would certainly be valuable; however, I set these aside here and focus on the two particles that I will be investigating in this thesis: Glasgow Scots *-int* and Shetland dialect *-n*.

### Glasgow Scots *-int*

In Glasgow Scots, the literature reports a particular form of negation used in certain non-canonical questions: *-int* [m?]. Brown and Millar (1980) briefly mention *-int* as being used in confirmational tags in Glasgow, while Macafee (2011) argues that it is a recent innovation in the variety. Thoms et al. (2013) provide the most detailed discussion of *-int* to date, with numerous examples.

Firstly, they explain that *-int* combines with the onset of the relevant auxiliary verb to give the particle forms shown in Table 2.1.

We must consider whether *-int* is simply a phonological reduction from *-n't*, since, as explained above, phonological reduction processes of negative auxiliaries in English dialects are very common. At their most extreme, such processes lead to forms like those found in the Black Country (65-66), where the negative marker (whether that is *-n't* or *-na* (Clark and Asprey 2013)) is lost entirely and vowel mutation marks the negation (65). The mutation may then be lost, as in (66).

(65) Why didn't [dei] you bring me back no shrimps? (Clark and Asprey 2013)

(66) I can't [ka:] think of any others. (Asprey 2007:138)

A similar reduction example is found in the north east of Scotland (Smith 2000, McClure 2002) and Fife (Weir 2007) in which *dinna* 'don't' can be reduced to [da:].

Root	Negative			Particle		<i>Standard</i>	
can	[km]	cannae	[ka.ne]	kint	[kmʔ]	<i>can't</i>	[kanʔ]
could	[kud]	couldnae	[kud.ne]	kint	[kmʔ]	<i>couldn't</i>	[ku.dənʔ]
should	[ʃud]	shouldnae	[ʃud.ne]	shint	[ʃmʔ]	<i>shouldn't</i>	[ʃu.dənʔ]
will	[wɪl]	willnae	[wɪl.ne]	wint	[wmʔ]	<i>won't</i>	[wɔnʔ]
would	[wid]	widnae	[wid.ne]	wint	[wmʔ]	<i>wouldn't</i>	[wu.dənʔ]
do	[du]	don't	[donʔ]	dint	[dmʔ]	<i>don't</i>	[dɔnʔ]
does	[dʌz]	doesnae	[dʌz.ne]	dint	[dmʔ]	<i>doesn't</i>	[dʌ.zənʔ]
did	[dɪd]	didnae	[dɪd.ne]	dint	[dmʔ]	<i>didn't</i>	[dɪdənʔ]
have	[he]	havnae	[hʌv.ne]	hint	[hmʔ]	<i>haven't</i>	[hʌ.vənʔ]
has	[hez]	hasnae	[hʌz.ne]	hint	[hmʔ]	<i>hasn't</i>	[hʌ.zənʔ]
had	[hɛd]	hadnae	[hʌd.ne]	hint	[hmʔ]	<i>hadn't</i>	[hʌ.dənʔ]
am	[ʌm]	amnae	[ʌm.ne]	int	[mʔ]	<i>?amn't</i>	[ʌ.mənʔ]
is	[ɪz]	isnae	[ɪz.ne]	int	[mʔ]	<i>isn't</i>	[ɪ.zənʔ]
are	[ʌr]	arnae	[ʌr.ne]	int	[mʔ]	<i>aren't</i>	[ʌ.rənʔ]
was	[wɪz]	wasnae	[wʌz.ne]	wint	[wmʔ]	<i>wasn't</i>	[wʌ.zənʔ]
were	[wɪr]	wernae	[wʌr.ne]	wint	[wmʔ]	<i>weren't</i>	[wɛ.rənʔ]

Table 2.1: Auxiliary verbs and negation forms in Glasgow Scots.

- (67) *[da:] ken fit is iz*  
 dinna ken fit this is  
 ‘don’t know what this is’ (Aberdeenshire, McClure 2002:75)

While the Black Country and Aberdeenshire examples are particularly extreme, there are other relevant phonological reduction processes taking place with regard to negative auxiliary verbs. In the north of England, for example, Petyt (1985) and later Steele and Whisker (2007), discuss reduction processes in Yorkshire, where in negative auxiliary verbs, both loss of *n* following a vowel and loss of a consonant before *-n't* are commonly attested. The second process gives rise to forms very similar to the Glasgow forms, such as [dmʔ] and [wɔnʔ].

- (68) We didn't [dɪnt] have any accidents with the big buses. (Steele and Whisker 2007)
- (69) I wouldn't [wɔnʔ] like to be her. (Petyt 1985:182)
- (70) Couldn't [kɔnʔ] you do it? (Petyt 1985:182)

There are some differences between the Glasgow Scots situation as presented in the literature and the reduction process seen in the Black Country and Yorkshire. First, reductions in Glasgow are claimed to be systematic with respect to the combination of

the onset and the *-int* [ɪnʔ] marker, rather than the loss of a consonant before *-n't*: note, for example, both *can* and *could* share the same form [kɪnʔ]. The outcome is nevertheless the same, or extremely similar, in some contexts (e.g. [dɪnʔ] in place of *didn't*). Most importantly, the phonological reduction evidenced in Yorkshire and the Black Country is a general process, which takes place across constructions – declaratives, matrix interrogatives, tags etc. In contrast, Thoms et al. (2013) make claims about the distribution of Glasgow Scots *-int* which suggests that it is not a regular reduction process.

Thoms et al. (2013) claim that *-int* is only available in tag questions (with positive anchors) and exclamatives (e.g. 71-72).

(71) *They wur leavin, wint they?*  
 they were leaving were.INT they  
 ‘They were leaving, weren’t they?’ (Glasgow, Thoms et al. 2013:18)

(72) **Hint** she just got an amazing wee voice! (Glasgow, Thoms et al. 2013:19)

This suggests that *-int* is *not* the result of a general reduction process but has become specialised for a specific purpose – perhaps from a phonological reduction of the non-canonical *-n't* described above. This sort of specialisation is common. For example, while *int* is a common reduction of *isn't* or *ain't* in English varieties, in Multicultural London English the reduction of *ain't it* to *int it* was the first step towards the development of *innit*.

ain't it [ɛɪnt ɪt] → int it [ɪnt ɪt] → innit [ɪn ɪt] (Andersen 2001:106)

Andersen (2001) gives an example from the Corpus of London Teenage Language where *innit* is found in a *wh*-question.

(73) Well why **innit** there? (Andersen 2001:106)

This shows that the development of *innit* does come from a general process: however, it has now grammaticalised as an invariant tag for younger speakers – no longer following the canonical tag question paradigm, as seen in (74) – and has taken on a variety of discourse roles distinct from the original role of the tag question (such as in (75), where *innit* is used to express agreement with the implicature of the *wh*-question) (Krug 1998, Andersen 2001, Pichler 2017).

(74) **Josie:** She loves her chocolate, innit?  
**Truno:** Yeah! (Andersen 2001:97)

(75) **Dawn:** What are you saying that for?!

**Grace:** Innit.

(Andersen 2001:146)

The claim made by Thoms et al. (2013) regarding the distribution of *-int* does raise a number of questions, however. Firstly, as we saw in chapter 1, tag questions are used in a range of contexts based on speaker's epistemic belief and evidential bias. How does *-int*'s distribution line up with these parameters? Secondly, the distribution across 'tag questions' and 'exclamatives' causes some issues for the set-up in the literature where tag questions are a subset of biased questions, exclamatives are a subset of polar rhetorical questions, and there is no overlap between tags and exclamatives. What exactly is *-int*, then, and what would this tell us about the relationship between the non-canonical question constructions?

Finally, there is no discussion in the literature about whether or not constructions with *-int* and a lower *no* marker are available, like the *-n't* and *no* constructions we saw in examples (56-57). This is important to establish and will feed into the analysis for *-int*.

### Shetland dialect *-n*

While there has been some discussion in the literature of Glasgow Scots *-int*, there has been almost no mention of Shetland dialect *-n*, with the exception of Robertson and Graham (1952:10), who state that '*the [negative] interrogative is formed by suffixing -n or -na [to the auxiliary]*'. The authors give two examples of this *-n* marker (76-77); other examples can be found in the dialect literature (e.g. (78)).

(76) ***Is'n*** *shö a boanny ting?*  
is.N she a pretty thing  
'Isn't she pretty?'

(77) ***Can'n*** *we no<sup>18</sup> aa come in?*  
can.N we not all come in  
'Can't we all come in?' (Shetland, Robertson and Graham 1952:10)

(78) ***Im'n*** *I taald ye stories oot a number, til noo I haena een*  
am.N I told you.PL stories out of number til now I have.NEG one  
*left ta tell!*  
left to tell  
'Haven't I told you so many stories?! So now I don't have any left to tell.'

(Shetland, Jamieson 1962:25)

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<sup>18</sup>The second negative marker in this example is interesting; I will discuss it further below.

A similar form of *-en* or *-nin* seems to be found in late 19<sup>th</sup> and early 20<sup>th</sup> century Aberdeenshire, with Wight (1922) including examples such as *wullen* where standard English would use ‘won’t’, *wuden* ‘wouldn’t’ and *diven*<sup>19</sup> ‘don’t’; examples with *-nin* are recorded by Grant and Main Dixon (1921), such as (79).

- (79) *Divnin ye see the ships sailin on’t?*  
do.NIN you see the ships sailing on it  
‘Don’t you see the ships sailing on it?’  
(Aberdeenshire, Grant and Main Dixon 1921:116)

However, there is no more recent evidence of any of these *-en* or *-nin* constructions in any north east mainland dialects, unlike Shetland dialect *-n*, which is attested in dialect writing at least in the late 20<sup>th</sup> century and in conversation by speakers in the present day (e.g. (80)).

- (80) You have a standing ticket, do’n you? (attested, 9<sup>th</sup> June 2018)

The *-n* particle in Shetland dialect can be phonologically represented as [ən], and can be attached to any auxiliary verb and inverted in order to form an interrogative. There are no phonological changes to the root of the auxiliary when *-n* is suffixed, suggesting that it is not simply a reduction of an extant negative marker. However, the particle is only distinguishable from a reduced form of standard English *-n’t* or the local negative marker *-na* in a limited number of phonological contexts. The full distribution of *-n* and how it combines with different auxiliaries is presented in Table 2.2.

There are three cases where there are clear differences between *-n* and either standard variety – *can’n*, *do’n* and *will’n*. In all three of these cases, the fact that there has been no phonological alteration from the root clearly distinguishes them from the standard Scots and English forms.

All of the other cases are clearly distinguished from the standard Scots negative marker through syllabification; however, the only thing that separates them from the standard English is a lack of [t] or [ʔ]. There are a number of cases where there is a vowel

<sup>19</sup>*Divn’t* is a negative, generally non-past form of *do*, localized to the north east of England (Rowe 2007, Pichler 2009, Beal et al. 2012) and the north east of Scotland (Rowe 2007), where it is now limited to tag questions (Jennifer Smith, cf. Rowe 2007). *Divn’t* is restricted to present tense 1<sup>st</sup> and 2<sup>nd</sup> person contexts only.

<sup>20</sup>The *have* forms are perhaps less common due to the *be*-perfect in Shetland dialect (Pavlenko 1997, Smith and Durham 2012). As can be seen in example (78), Shetland dialect speakers traditionally employ *be* where standard English would use *have* to form perfectives. However, older and middle-aged speakers in the present day vary between *be* and *have* forms (Smith and Durham 2011), and the *be*-perfect appears to be in decline among younger speakers, with evidence of *hyperdialectal* (see section 2.5 for a full discussion of hyperdialectalism) behaviour, with certain speakers having extremely high usage rates, and others barely using it (Smith and Durham 2012).



Root		Negative		Particle		Standard	
can	[kɪn]	canna	[kɑ.nə]	can'n	[kɪ.nən]	<i>can't</i>	[kɑnʔ]
could	[kud]	couldna	[kud.nə]	could'n	[ku.dən]	<i>couldn't</i>	[ku.dənʔ]
should	[ʃud]	shouldna	[ʃud.nə]	should'n	[ʃu.dən]	<i>shouldn't</i>	[ʃu.dənʔ]
will	[wɪl]	winna	[wɪ.nə]	will'n	[wɪ.lən]	<i>won't</i>	[wɔnʔ]
would	[wid]	widna	[wid.nə]	wid'n	[wɪ.dən]	<i>wouldn't</i>	[wu.dənʔ]
do	[du]	dunna	[dʌ.nə]	do'n	[du.ən]	<i>don't</i>	[dɔnʔ]
does	[dʌz]	doesna	[dʌz.nə]	does'n	[dʌ.zən]	<i>doesn't</i>	[dʌ.zənʔ]
did	[dɪd]	didna	[dɪd.nə]	did'n	[dɪ.dən]	<i>didn't</i>	[dɪ.dənʔ]
have	[hɪv]	havna	[hɪv.nə]	hav'n <sup>20</sup>	[hɪ.vən]	<i>haven't</i>	[hɑ.vənʔ]
has	[hɪz]	hasna	[hɪz.nə]	has'n	[hɪ.zən]	<i>hasn't</i>	[hɑ.zənʔ]
had	[hɛd]	hadna	[hɪd.nə]	had'n	[hɪ.dən]	<i>hadn't</i>	[hɑ.dənʔ]
am	[ɪm]	amna	[ɪm.nə]	am'n	[ɪ.mən]	<sup>?</sup> <i>amn't</i>	[ɑ.mənʔ]
is	[ɪz]	isna	[ɪz.nə]	is'n	[ɪ.zən]	<i>isn't</i>	[ɪ.zənʔ]
are	[ɪr]	irna	[ɪr.nə]	ir'n	[ɪ.rən]	<i>aren't</i>	[ɑ.rənʔ]
was	[wɪz]	wisna	[wɪz.nə]	wis'n	[wɪ.zən]	<i>wasn't</i>	[wɑ.zənʔ]
were	[wɪr]	wirna	[wɪr.nə]	wir'n	[wɪ.rən]	<i>weren't</i>	[wɛ.rənʔ]

Table 2.2: Auxiliary verbs and negation forms in Shetland dialect.

change between the local form and the standard form that would be used when ‘knappin’ (‘speaking properly’) (*wid'n*, *ir'n*, *wis'n* and *wir'n*, as well as *am'n*, where the standard form would be *amn't*, though the acceptability of *amn't* is extremely variable across English varieties (Quirk et al. 1985, Hudson 2000, Anderwald 2002)). However, vowels are often less tense in fast speech (Port 1976, Miller 1981, Fourakis 1991) and so this cannot be taken to be a firm distinction.

Finally in the paradigm, there are a number of cases where the lack of final [t] or [ʔ] are the only differences between the *-n* particle and the standard English *-n't* (*could'n*, *should'n*, *did'n*, *does'n*, *is'n*). However, final [t] or [ʔ] is frequently dropped from negative auxiliary verbs in speech across English varieties (Anderwald 2002:68). For example, ‘nasal flapping’ of [t] or [ʔ] takes place when [t] occurs between [n] and a vowel (Labov 1989), leading to realisation of [t] as [ɾ̃], a nasalised flap. In these contexts, it becomes impossible to distinguish the *-n* variant from *-n't*. I will investigate both clearly distinct cases of *-n* and cases of *-n* which could potentially be confounded with the standard due to flapping in this thesis. For more details, see section 2.4.

Regarding the syntactic distribution of *-n*, there is no information in the literature beyond the mention of ‘interrogatives’ made by Robertson and Graham (1952). However, as we saw in the introduction, ‘interrogatives with negation’ come in many different shades.

It is difficult to tell from Robertson and Graham's examples, and the examples in the literature exactly how these constructions should be classified: (76) could likely be some form of exclamative, but without context it could also be a biased question in the face of some challenging evidence. (77) and earlier example (27) are likely biased questions while (78) seems to be a rhetorical question. At first glance, it seems *-n* has a somewhat wider distribution than Glasgow Scots *-int*, but without full investigation that can only be speculation. Furthermore, there is no clear evidence of *-n* in a true negative question, but this also needs to be tested. Finally, the possibility of having *-n* combine with a lower negative marker *no* in the tag on a negative anchor is not attested in the literature: from my own judgment and discussion with dialect speakers, a construction like (81) is acceptable. However, this will also be tested more broadly.

(81) She canna come, can'n she no?

Finally, to give some additional attention to the example in (77) in which there is both the *-n* marker and an unreduced negative marker *no* lower in the clause of a matrix interrogative. Further examples are attested by speakers in the present day, both in matrix biased questions (82) and as tag questions on positive anchors (83).

(82) Do'n they **no** have a bakery in Walls?

(attested 4<sup>th</sup> July 2017)

(83) It must be three year since I left there, is'n it **no**? (attested 23<sup>rd</sup> January 2016)

The meaning of these questions is the same as a biased question with a single negative marker in a standard English. As we saw above, negative concord is not especially prevalent in Shetland dialect, and it seems surprising that this particularly unusual instance of negative concord would be present. Furthermore, other varieties which have the *-n't* and *no* combination as tags on negative anchors (e.g. Edinburgh (Millar and Brown 1979)) are claimed not to have the construction available on positive anchors.

(84) \*She likes him, doesn't she no? (Edinburgh, Millar and Brown 1979:30)

Shetland dialect *-n* is therefore understudied in the literature; even in literature on Shetland dialect, it has barely been mentioned. From attestations and examples in the literature, it seems as though *-n* is limited to non-canonical questions; however, is it the case that it is available in all of the speaker belief and evidential bias contexts that license non-canonical questions with negative markers in standard English? Its distribution

needs to be established. In establishing its distribution, it will be useful to compare with Glasgow Scots *-int*, which, from the literature, appears to have a more limited set of available contexts. Comparing the two constructions will help to address the broader questions presented at the beginning of this thesis.

### 2.3.3 Summary

Although negation in Scots appears to pattern relatively similarly to standard English in terms of sentential negation in declaratives and to a large extent with negation in imperatives, there are substantial differences in how negation operates in interrogatives, with reduced negation marker *-na(e)* unable to undergo subject-auxiliary inversion, even in non-canonical question contexts. While the standard structure for both true negative questions and non-canonical questions with negation is therefore verb-subject-*no*, it appears that across Scots varieties, particles have been innovated to express certain non-canonical interrogative meanings. The literature identifies at least four different strategies: *-n't* across north east and east central Scots, *e/e no* in Edinburgh and Fife, *-int* in Glasgow and *-n* in Shetland, perhaps more historically also in the north east mainland. The properties of each appear to be slightly different. In this thesis, I focus on Glasgow Scots *-int* and Shetland dialect *-n*.

In the introduction, I presented the questions I wish to address in this thesis, including about the information that licenses non-canonical questions, how this information is encoded in the constructions, and the overall relationship between non-canonical questions with negation markers. Both Glasgow Scots *-int* and Shetland dialect *-n* share the qualities of being restricted to some number of non-canonical question constructions that, in standard English, use reduced negative marker *-n't*. However, unlike standard English, it does not appear from the literature that *-int* and *-n* can be general negative markers (unlike *-n't*, which, while attested only in non-canonical questions in Scots, clearly also has a role as a general negative marker in standard English). This gives us a perfect opportunity to investigate the exact pragmatic contexts required for these non-canonical question constructions, as well as to look at what is encoded in the constructions, and how this is represented syntactically.

The first task is to establish the distribution of the particles in more detail. In the next section, I lay out the methodology that I will use, giving some background on traditional (dialect) syntactic judgment methods before discussing more recent laboratory pragmatics work on question bias and how I incorporated the two methods.

## 2.4 Methodology

### 2.4.1 Methodological background

#### Gathering syntactic judgment data

Since at least Chomsky (1966), the classic data collection method for syntactic data has been acceptability judgments, presented in the literature as such:

(85) \*Whom do you know the date when Mary invited?

(86) ?Which man do you wonder when to meet?

(87) Which man did Bill go to Rome to visit?

(Haegeman 1995, cf. Bard, Robertson and Sorace 1996)

Chomsky's first attempts at developing an introspective methodology aimed to determine *grammaticality*, and posited a binary grammatical/ungrammatical distinction, with ungrammaticality marked by an \* (85). However, over the years, additional distinctions such as the ? seen in (86) have been included and the idea of a grammatical/ungrammatical distinction has been brought up for question. The methodology has thus been subject to considerable criticism over the years (Quirk and Greenbaum 1970, Labov 1972c, Newmeyer 1983, Nagata 1988, Rizzi 1990, Bard et al. 1996), and the idea of a *gradient acceptability* has become more common. While researchers remain interested in tapping into true grammaticality and the possibility of a Universal Grammar which may be binary, the reality of what speakers accept certainly isn't binary. Establishing acceptability is thus generally carried out through rating tasks such as Likert scales or magnitude estimation tests (Bard et al. 1996, Schütze 1996, Sprouse 2007, Bader and Häussler 2010, Sprouse et al. 2013, Schütze and Sprouse 2014, Sprouse and Almeida 2017, Langsford et al. 2018).

The use of judgments in syntactic data collection has meant that for standard varieties, especially standard English, a huge amount of data has become available and allowed morphosyntactic research in the generative tradition to flourish. It was not until much later that the grammar of non-standard dialects began to be taken seriously, and the same sort of grammaticality judgments tasks began to be used with speakers of non-standard varieties (Rizzi 1982, 1986, Poletto 1993, Zanuttini 1994, Henry 1995).

Of course, it was not that non-standard varieties had been entirely ignored until that point. Traditional dialectology methods (e.g. the Survey of English Dialects (1962))

involved direct elicitation with speakers in order to gather primarily lexical as well as small quantities of morphological/phonological data from non-standard varieties. While those elicitation tasks are undoubtedly valuable and allow for large scale data collection (which if necessary can be carried out without the presence of a trained researcher, thus saving time), within the methodologies of these traditional dialectological surveys, there are a number of problems that arise. Firstly, speakers are often not good at judging their own usage patterns – for example, social norms such as pressure towards a standard may heavily affect speakers' self-reporting (Labov 2001:199); furthermore, speakers style shift, and the formality of a elicitation situation, especially with a stranger, leads to a reduction in usage of the vernacular – the exact type of speech that we are trying to elicit (Labov 2001). All of this leads to the overall problem of trying to gather data from non-standard varieties: the Observer's Paradox.

The Observer's Paradox suggests that by virtue of being present, the researcher is likely to affect the speech behaviour of their participants. The most common issue of the Observer's Paradox is that it is possible that as an academic, and potentially an outsider to the community, the researcher's presence will create a situation where speakers modify their behaviour or deny use of non-standard variants in order to seem more 'proper' (Henry 1995, Labov 2001, Adger and Trousdale 2007). On the other hand, the Observer's Paradox may also lead to participants accepting features they would not produce, or altering their speech so as to seem more 'local' – particularly in a situation where a speaker is proud of their community and their identity, and use their general knowledge of a variant within the community to misestimate their own usage (Henry 1995:14). Both create equally challenging difficulties for the researcher, and need to be taken into account when designing an experiment.

Developed primarily by Labov (1966, 1972b), sociolinguistic interviews were designed to tackle the Observer's Paradox. By collecting corpora of naturalistic speech data from community members by situating oneself in the community at hand and recording conversations at length with speakers on topics relevant to the local community, researchers can gather data which closely represents the vernacular of the speakers. This methodology could then be extended by including multiple members of the same community (e.g. a family) in a single interview, allowing the speakers to converse with each other and thus allowing the researcher, potentially an outsider, to step even further back from the interview (Gumperz 1964, Labov 1972c).

Sociolinguistic interviews remain the 'gold standard' for data collection in non-

standard varieties (Tagliamonte 2012:106). Like the traditional dialectology work that they aimed to improve upon, sociolinguistic interviews have proven extremely useful for gathering phonetic, phonological, lexical and morphological data – but syntactic data has remained understudied until more recently.

The most important and obvious reason for this is that a single syntactic construction is unlikely to be produced to any great frequency within a sociolinguistic interview context. There may be multiple ways to express the same sentiment; the nature of the discussion may not require a particular construction, or it may simply be an infrequent construction in the grammar overall (Labov 2001, Cornips and Poletto 2005, Buchstaller and Corrigan 2011). Syntactic constructions are also by their very nature larger than an individual lexical item or phoneme, and thus require a much more substantial quantity of interview time to gather a non-trivial number of tokens that can be analysed. Furthermore, complex interactions between different syntactic (or additional pragmatic) factors are even less likely to emerge in an hour-long interview context. It is thus necessary when carrying out work on dialect syntax to find ways to combine the breadth of data collection that traditional introspective methods of syntactic acceptability judgments can give us with the best practice from sociolinguistics in order to ensure that we access speakers' vernaculars as best as possible.

In recent years, a number of large scale dialect syntax projects have attempted to do just this, while also gathering descriptive and theoretical data across varieties. Projects on Scandinavian varieties (ScanDiaSyn, <http://www.tekstlab.uio.no/nota/scandiasyn/>), Welsh (the Syntactic Atlas of the Welsh Dialects, <http://www.ling.cam.ac.uk/david/sawd/>), Dutch (SAND, <http://www.meertens.nl/sand/>), American English (the Yale Grammatical Diversity Project, <http://microsyntax.sites.yale.edu>) and Scots (SCOSYA, <http://scotssyntaxatlas.ac.uk>) have all worked to establish methodologies and gather data on syntactic variation in the dialects of these languages. Below, I will detail the 'interview method', established by the SAND project (Cornips and Poletto 2005, Barbiers and Bennis 2007) and used and refined in various other dialect syntax research (Thoms 2014, Jamieson 2015) that I adapted for use in this research.

### **The interview method**

In the 'interview method', a written questionnaire is constructed which includes examples of all the relevant phenomena that the researchers wish to investigate. Each example is

SCOSYA fieldwork questionnaire

Rate the following sentences on a scale of 1 to 5, where 1 is the bottom end of the scale (bad) and 5 the top end (good). The criteria for the different points on the scale are given below. There will be a bit of context, and then the sentence that you are to rate follows “and you say\_\_\_.”

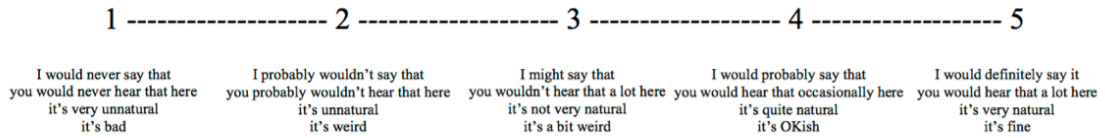


Figure 2.2: Likert scale given to participants in the Scots Syntax Atlas project.

embedded in a short context, so as to make the example as naturalistic as possible, such as (88), where the example that was being tested follows the short context and ‘you say’.

(88) We’re out for a walk. You point at somebody wearing a silly hat and you say: ‘*Sees du yun?*’

(Jamieson 2015:39)

The researcher subsequently organises interviews with pairs of participants, who, in the style of Labov’s extended interview, know each other well – friends, family members etc. This paired interview structure attempts to reduce the Observer’s Paradox as far as possible by having participants work with someone they know well, and with whom they would use their vernacular variety. Each interview consists of two sessions: in the first session, the interviewer reads out the questionnaire contexts and examples to one of the participants, who rates each example on a Likert scale from 1-5. In the second session, the first participant reads out another randomised form of the questionnaire to the second participant, who then carries out the same rating process. For example, the Scots Syntax Atlas project presented participants with a scale where 1 corresponded to something that was associated with the labels ‘I would never say that; you would never hear that here; it’s very unnatural; it’s bad’. On the other hand, 5 was associated with the labels ‘I would definitely say it; you would hear that a lot here; it’s very natural; it’s fine’ (see scale in Figure 2.2).

Broadly, Likert scale judgments of this sort have been shown to be valid and reliable indicators of acceptability in syntax (Sprouse et al. 2013, Sprouse and Almeida 2017, Langsford et al. 2018). With regard to dialect syntax specifically, during a pilot experiment

for SCOSYA carried out in Buckie Scots, Thoms (2014) established the judgments given by speakers in an interview method task matched with levels one would expect based on previous sociolinguistic interview data collected in the area on a particularly frequent morphosyntactic variable (negative concord).

As well as the rating process itself, in the interview method participants are encouraged to discuss the reasoning behind their judgments with the interviewer, or with each other, and to give as much extra information as they like. All of their discussion is recorded to give additional qualitative data to the research and in particular to try to avoid one of the problems of introspective acceptability judgment research – participants may be judging any part of the stimuli or its context, not just the part that is relevant for the research at hand. Allowing participants to openly discuss their reasoning and incorporating this into the research gives a more rounded picture of the phenomena investigated.

The ‘interview method’ has proven successful for both broad, large-scale data collection and investigating change in specific features, tackling some of the major issues in dialect syntax data collection by making the situation as informal as possible; having participants work in pairs with a friend or family member who is from the same community; ensuring the examples and contexts are as naturalistic as possible and effectively conducting a set of very small, structured conversations with the participants. However, while the method has proved extremely useful for judgments on constructions with purely syntactic variation, recall from chapter 1 and section 2.3 that there are a number of additional pragmatic and possibly intonational factors that could influence the acceptability of the *-int* and *-n* particles. These therefore need to be factored into the methodology.

For example, in order to reduce the influence of the standard language as far as possible, examples in Jamieson (2015) and the SCOSYA project were written in an orthography matching, as closely as possible, the local dialect. However, Jamieson (2015:40) states that some of their participants ‘indicated apprehension regarding their ability to "read in Shetland dialect"’; although participants were able to successfully complete the task, their lack of familiarity with reading dialect out loud meant that sometimes they stuttered, or read the examples with an unnatural intonation if they did not correctly predict what the end of the sentence was going to be. While this is not a problem for examples that focus on syntactic phenomena like word order or the acceptability of a specific lexical item, it becomes a serious concern when intonation may



affect the interpretation of the example.

I thus turn to give an overview of the methodologies used in recent experimental works which have investigated the types of non-canonical questions that feature in this research. Following this, I will explain how I incorporated features of this experimental pragmatics research into the ‘interview method’ as described above in order to keep the effects of the Observer’s Paradox low, while being able to test the full range of phenomena required to understand the distribution of *-int* and *-n*.

### **Incorporating laboratory pragmatics methods**

As with most syntactic and semantic phenomena, and as detailed above, research on non-canonical questions for many years relied on introspective judgments (Ladd 1981, Büring and Gunlogson 2000, van Rooij and Šafářová 2003, Romero and Han 2004, Sudo 2013). However, in more recent years, the development of more sophisticated experimental pragmatics methodologies have lead to quantitative data collection on various sections of the topic in a number of languages (Wochner et al. 2015, Seeliger and Repp 2016, Dehé 2017, Domaneschi et al. 2017).

The results of Domaneschi et al. (2017) concerning the evidential and epistemic biases that license interrogatives were summarised in chapter 1. In order to establish the distribution that they found, the researchers presented participants with a short context which established the epistemic belief they were to hold. This information was presented written on a screen (with a small relevant cartoon, e.g. a picture of a train). In this example, the participant is given a belief that there is a train which leaves before 07:00.

- (89) Tomorrow you need to go from Nottingham to Sheffield very early. Your brother goes there quite frequently and you remember he told you that *he usually takes a train in the morning, before 07:00*. (bel =  $p$ )

On the next screen, the evidence surrounding their ‘interaction’ was presented in the same way. In this example, the operator presents counterevidence that there is a train before 07:00.

- (90) You go to the station to the ticket office and you ask for a train ticket for the next morning. The operator answers you: *the only train available is at 11:00*. (ev =  $\neg p$ )

Participants were then asked to choose the question they would be most likely to use from a list, such as the list given here (Domaneschi et al. 2017:13).

- Is there a train in the early morning?
- Really?! Is there a train in the early morning?
- Is there no train in the early morning?
- Isn't there a train in the early morning?
- Other ways of asking if there is a train in the early morning

Participants were then asked to produce the question they had chosen into a microphone so as intonational information could also be recorded.

In a different experiment, Wochner et al. (2015) investigated the prosody of German rhetorical questions, and how speakers distinguish potentially ambiguous rhetorical interrogative structures from genuine questions. In their study, participants were paired in a soundproof booth, and seated in front of a computer screen. One participant was assigned the addressee role, and another the speaker role. Each participant was presented with a context including the relevant epistemic and evidential biases, which they read silently to themselves.

(91) Die Oma des Sprechers erkundigt sich, ob dieser Lust habe mit ihr und den anderen Enkelkindern eine Runde Domino zu spielen. Jeder weiß jedoch, dass Domino total veraltet ist.

*'The speakers' grand mother is asking her grand child whether he wants to play dominos with her and the other grand children. However, everybody knows that dominos is totally out of date.'*

The 'speaker' would then read out the target utterance, a question.

(92) Wer spielt denn Domino?

*Who plays dominos?*

The 'addressee' would produce what they deemed to be the most appropriate response, thereby establishing whether they had interpreted it as a rhetorical question or an information seeking question. All dialogue was recorded and analysed to establish the intonational cues that German speakers use when producing rhetorical questions and information-seeking questions – also relevant for the purposes of this research is that, based on these cues in combination with the context, the 'addressees' in Wochner et al.'s study were able to determine whether the question was rhetorical or not.

Seeliger and Repp (2016) investigated different interpretations of question intonation in Swedish by asking participants to produce a sentence such as the example in (93) which can either function as a rejecting declarative, or a rejection question, based on its intonation contours. Participants were presented with the epistemic and evidential bias contexts on screen, and then given the sentence to produce.

(93) Inte målar Anna Maja?

*But Anna is not painting Maja!*

*Surely Anna is not painting Maja?*

Recent experimental pragmatics work, then, has relied on reading aloud written stimuli to establish how participants understand non-canonical questions. However, as mentioned above, production of written stimuli is a problematic methodology for use in data collection with non-standard varieties. These are spoken varieties, and speakers are not used to reading the material. The formality of this task would also reintroduce some of the style shifting that methodologies like the interview method aim to avoid.

However, the L2 acquisition literature contains experimental methods which ask participants to demonstrate *understanding* of intonation variation. Cruz-Ferriera (1989) presents an experiment that she developed to test Portuguese L2 speakers of English and their understanding of its intonation patterns. In this experiment, participants are informed that the focus of the study is the intonation patterns. They then listen to pre-recorded sentences. Each sentence is played three times, after which participants are asked to choose one of three possible meanings for the given sentences. The possible meanings are given to the speakers in written form in their native language. The sentences Cruz-Ferriera included in the study varied, but included rhetorical questions like (94) and tag questions like (95) (note that the ‘meanings’ would have been presented to the Portuguese learners in Portuguese). ‘ signals prosodic stress.

(94) ⦿didn’t John en’joy it

- a) the speaker is remarking on how great John’s enjoyment was
- b) the speaker is asking if John enjoyed it
- c) the speaker is saying that John did not enjoy it

(95) ⦿you’ve been here before / ‘haven’t you

- a) I’m sure I’ve seen you here before
- b) you may have been here before, but I’m not sure about it
- c) I’m disappointed that you’ve been here before

The study was primarily designed to be used as an evaluation instrument for teachers, and participants' abilities in the test thus varied depending on their abilities in their L2.

Based on Cruz-Ferriera's work, Jiang (2005) also presented a study in which non-native speakers of English, this time of Mandarin and Cantonese, were asked to listen to two examples of the same English sentences with varying intonation, and determine based on their intonation what the meaning of each sentence was. An example is given in (96).

(96) ♪are you sure you've brought it with you

- a) the speaker is asking a question and is not sure of the answer, which could be either 'yes' or 'no'
- b) the speaker is asking a question and expects the answer 'no'

Jiang found that her native English speaking control group were able to complete the task with an 89% success rate for perception (picking up on whether the two examples had differing intonation) and an 87% success rate for comprehension (choosing the correct meaning for each example)<sup>21</sup>. While her control group was small, with only 135 judgments given, the high success rates indicate that native participants were able to distinguish between different intonation patterns at a reliable rate, and to correctly identify the intended meanings.

The evidence from Cruz-Ferriera (1989) and Jiang (2005) seems to suggest that in listening tasks, participants can distinguish between intonation patterns and ascribe the correct meaning to them. So, although *production* tasks are most common in testing non-canonical questions, it seems as though *perception* tasks also have a role.

Using the evidence from experimental pragmatics and L2 acquisition, then, I will now set out how I adapted the 'interview method' to test the acceptability of *-int* in Glasgow Scots and *-n* in Shetland dialect across constructions, including non-canonical question constructions.

#### 2.4.2 The method used in this research

The methodology used in this research was designed to specifically incorporate the relaxed, 'local' nature of the interview method with some of the techniques from recent experimental pragmatics work. At its core, it was still an acceptability judgment task on a 1-5 Likert scale. In this section, I will justify the steps that I took when designing the materials for this study, before explaining how the experimental sessions were run.

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<sup>21</sup>Rates for non-native speakers varied from 70-87% success in perception and 42-61% in comprehension.

Firstly, example sentences were designed to test the acceptability of *-n* and *-int* in the following contexts, as well as to test examples of standard negative forms in each context: so, verb-subject-*no* constructions for interrogatives and reduced *-na(e)* negation for declaratives, imperatives and subject *wh*-questions<sup>22</sup>. All stimuli can be seen in Appendix A.

i) Negative declaratives

e.g. I can'n/kint come.

e.g. I havena(e) checked yet.

ii) Negative imperatives

e.g. Do'n/Dint eat any!

e.g. Dunna/don't<sup>23</sup> be late!

iii) True negative polar questions (with NPI *either*)

e.g. Wid'n/wint you go either?

e.g. Can you no see either?

iv) True negative *wh*-questions (subject and object)

e.g. Who can'n/kint come?

e.g. What can'n/kint you eat?

e.g. Who doesna(e) eat meat?

e.g. What did you no like about it?

v) Rhetorical *wh*-questions (subject and object)

e.g. Who wid'n/wint want to go?!

e.g. Where am'n/hint I been?!

e.g. Who hasna(e) done that?!

e.g. What would he no do?!

vi) Matrix biased questions

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<sup>22</sup>Throughout, I transcribe the example contexts and sentences in standard English, except where the local variants relevant to the research are included – so, *-n* or *-int*. This is not indicative of how the participants heard the examples, with pronunciations and lexical items varying depending on the location. However, for ease of exposition and due to the lack of a standardised orthography for Scots, I will use standard English transcription.

e.g. Is'n/hint she been there before?

e.g. Can you no pick her up?

vii) Tag questions with positive anchors

e.g. You liked that pizza place, did'n/dint you?

e.g. You asked for lemonade, did you no?

viii) Tag questions with negative anchors

e.g. You canna(e) park there, can'n/kint you no?

e.g. You widna(e) want that, would you?

ix) Interrogative exclamatives

e.g. Wis'n/Wint that a terrible winter!

e.g. Did she no look beautiful!

x) Polar rhetorical questions

e.g. Wid'n/Wint she just love it?!

e.g. Did I no say you would do well?!

I also tested examples with both the *-n* or *-int* particles and a lower negative marker *no* in the matrix biased question, tag question on positive anchor, interrogative exclamative and polar rhetorical question contexts.

e.g. Can'n/kint you no come?

On the matrix biased questions, rhetorical questions and tag questions, I also varied the intonation. As was detailed in chapter 1.1.5, intonation has been argued to play an important role in the semantics of tag questions, with different intonation contours argued to give either a questioning or confirming meaning (Ladd 1981, Reese and Asher 2006). Examples were presented with either rising or falling intonation in order to test the potential effects of either contour on the acceptability of the construction.

As in the interview method, each example was embedded in a short context. Adapting this part of the methodology was reasonably straightforward: in the contexts, I was able to include information about the epistemic belief that the participant holds at

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<sup>23</sup>Recall Glasgow Scots' '*dinnae* gap', which means the standard construction in negative imperatives is *don't*.

that point in the conversation, as well as to introduce the evidential bias that frames the examples in the core non-canonical interrogative contexts. So, while in the interview method, the content of the context is not especially important and simply serves to create a more natural ‘dialogue’ between the interviewer and the participant, the context here was more like the contexts presented in Domaneschi et al. (2017) (shown in (89-90)), where important and relevant pragmatic information for the participants was included. These contexts therefore tried to incorporate aspects of everyday life for participants, as in the interview method, while also targeting specific pragmatic contexts.

Each context was different, except in the case of the tag questions and biased questions, where each positive anchor tag shared a context with the matrix question that otherwise had the same criteria for more direct comparison of acceptability. For example, a positive anchor tag with neutral evidential bias and rising intonation would share a context with a matrix biased question with neutral evidential bias and rising intonation. In the experimental pragmatics work, the contexts are kept the same – however, one of the reasons for using contexts in the interview method is to ensure the natural, conversational nature of the data collection and to keep formality low. I opted therefore to vary the contexts to keep participants engaged and the situation informal. Due to the subtle pragmatic differences in evidential biases created by the contexts, it was especially important that participants continued to pay attention to the contextual information throughout the task.

(97) At some point in the past, our friend Sarah told us she had been to Edinburgh Castle (bel =  $p$ ). You are trying to work out whether it is worth going to visit. You ask me for advice, and I say ‘you should ask Sarah’ (ev =  $\emptyset$ ). You say:  
Oh yeah, she’s been before, is’n/hint she?

(98) You say that you are making our friend Robert fish and chips for dinner (bel =  $p$ ). I say ‘but Robert’s a vegetarian’ (ev =  $\neg p$ ). You say:  
Does’n/Dint he eat fish?

Each relevant context contained four examples: each set of four examples used the auxiliary verbs *can*, *do*, *have*<sup>24</sup> and *would*. These four verbs were selected to cover both modal verbs (*can* and *would*) and auxiliaries (*do* and *have*).

The only context where this set of verbs varied was the exclamatives, where *be*, *have* and *do* were used. The factive requirements in an exclamative construction (Zanuttini and

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<sup>24</sup>Examples in Shetland used the *be*-perfect in place of *have*.

	declarative	imperative	negative question	wh-question subject	wh-question object	rhetorical subject	rhetorical wh-question object	exclamative	polar rise	rhetorical question fall	
-int / -n	4	4	4	4	4	4	4	4	4	4	
standard	4	4	4	4	4	4	4	4	4	4	
-int / -n + no	-	-	-	-	-	-	-	4	4	4	
	matrix biased question			positive anchor tag question				negative anchor tag question			
	neutral evidence		negative evidence		neutral evidence		negative evidence		neutral evidence		negative evidence
	rise	fall	rise	fall	rise	fall	rise	fall	rise	fall	rise
-int / -n	4	4	4	4	4	4	4	4	4	4	4
standard	4	4	4	4	4	4	4	4	4	4	4
-int / -n + no	4	4	4	4	4	4	4	4	4	4	4

Table 2.3: Contexts and numbers of examples per context in the Glasgow Scots and Shetland dialect data collection process.

Portner 2003) exclude the use of modal verbs in these constructions. The fourth example in the exclamative context was a past tense *be* example with *was* (therefore, *wis'n* or *wint*).

Varying all the factors, there were 236 relevant examples for participants to judge, distributed as in Table 2.3.

As well as the 236 relevant examples, 164 filler examples were included. These were designed to include other negation phenomena (e.g. negative concord, negation in pseudocoordination and subject positioning in negative imperatives), other interrogative constructions (e.g. positive polar questions and declarative questions), invariant tag particle *right*, and some purposefully ungrammatical examples in which, for example, the word order of a question was mixed up. Fillers were designed to give a broad variety of grammatical (e.g. 99), dialectal (e.g. 100) and ungrammatical (e.g. 101) judgments in order to ensure that participants continued to use the full scale throughout the experiment, and thus to give participants ‘anchor’ points (Nagata 1992, Cowart 1994). Fillers were also accompanied by short contexts which were similar to those given for the actual experimental materials, for example (99-101).

(99) One of our friends is always going on holiday, never to the same place. She’s just back from somewhere again, but you’re not sure where, so you say to me:  
Where did she go this time?

(100) We are discussing Andy Murray’s latest final. We were watching it together, but I had to go out. I ask you what happened and you say:  
He never won in the end.

(101) I want to try out the new restaurant down the road. I ask you if it’s good, but you say:  
I no am been yet.

Although the ‘gold standard’ in experimental linguistics is to give double the



number of fillers to example sentences, there is also a pay-off in terms of attention span and making an already long task even longer (Quirk and Svartvik 1966, Carden 1976, Schütze 1996, Cowart 1997). Previous interviews in e.g. the Scots Syntax Atlas project and Jamieson (2015) took up to an hour, with participants rating 200 examples. The surrounding contexts in this research are longer than those previous ones, and arguably require greater levels of concentration due to the various epistemic and evidential biases involved. Therefore, I did not wish to make it longer than necessary. However, as well as the fillers, there was also considerable variation in the types of constructions in the examples themselves: from declaratives and imperatives to *wh*-questions and tag questions, so there was already some variation built into the experiment.

One of the important parts of the interview method is that the examples are delivered spoken by another member of the community who is known to the participant (at least, in the second half of the interview). However, as highlighted above, non-standard speakers are not always confident in reading their dialect; this may cause problems in terms of intonation production if asking the participant to read from prepared dialect materials. There is also a potential fatigue issue in asking participants to read 400 example contexts. I therefore wished to incorporate the sort of recordings used in the intonation perception experiments described in section 2.4.1 to the task, in a way which was appropriate for the interview method.

Therefore, in each community, I had a speaker of the local dialect record each individual trial sentence. The speaker who recorded the Glasgow Scots examples was a 33-year-old man who matched the criteria required of the participants in Glasgow (see 2.4.2 for details). The speaker who recorded the Shetland examples was a 21-year-old man who matched the criteria required of the participants in Shetland. The choice of speaker to carry out the recordings may have had an effect on the results (e.g. a young speaker rather than an older speaker); however, both speakers were young men, and so any effect should be consistent across both communities. By recording the examples, I was able to control the intonation used, and ensure that every participant heard the same example, while still using a local voice in each location.

With the experimental materials designed to incorporate the additional pragmatic contexts and intonation requirements, the final step was to bring the experimental materials together in an appropriate format for testing with participants.

The 400 examples were split into two groups of 200 in order to run two sessions with each participant, to manage the length of time a participant had to concentrate. As

stated above, for each relevant context, there were four examples; two of each example were included in each session. *Can* and *do* were always paired together, and *would* and *have/be* were always paired together in order to have a the modal/auxiliary split. Pairs were taken alternately from the list of examples: for example, in session one, a positive anchor tag question with a neutral evidential bias and rising intonation would include *can* and *do* examples; positive anchor tag questions with neutral evidential bias and falling intonation would include *would* and *have/be* to ensure that examples were distributed across the experiment as much as possible. Session two would subsequently contain *would* and *have/be* from the rising intonation group, and *can* and *do* from the falling intonation group. All participants rated all examples over the course of the two sessions.

Each group of 200 was randomised per participant, so as to avoid ordering effects (Greenbaum 1973, Schütze 1996, Cowart 1997).

Using PsychoPy2 (Pierce 2007), I built a programme from which to play these sample sentences for participants. How this worked will be described below.

### **The session**

In order to collect the data required for this study, I followed the interview method in meeting with participants in their home community. This means that, rather than carrying out the research in an experimental pragmatics style laboratory setting, participants are interviewed in a location in which they would normally use their dialect, as is also important in traditional sociolinguistic interviews (Labov 1972b). Participants were given the opportunity to choose the location of their interview to allow them to choose where they would be most comfortable: they were told only that it needed to be a) quiet and b) uninterrupted for 2-3 hours. I met the majority of participants in their own homes. Four Glaswegian participants chose to meet in a local library, two Shetland participants chose to meet in a local community centre, and I met with one Glaswegian participant at her place of work.

The design of instructions for judgment tasks can be important for getting the most reliable results from participants (Schütze 1996, although see Cowart 1997 who argues that the specific details of the instructions don't affect participants' behaviour). It is important to ensure that participants are judging the correct materials – for the purposes of this, and other dialect syntax, research, this can mean at least making sure that participants know that the research aims to tap into their vernacular, and that the 'correctness' of examples does not mean trying to think about the standard. However, it is also important

that participants are not made explicitly aware of what the research is about, in order to avoid biasing participants to give what they believe to be the ‘correct’ or desired answers. Therefore, participants in this research were told that they would be taking part in research for my PhD in Linguistics, in which I was researching some aspects of Scots dialects. Before the task began, participants read an information sheet, and were given the opportunity to discuss this sheet with the interviewer (myself) and ask any additional questions. The participant subsequently signed a data gathering and speech recording consent form and completed a basic information sheet before the first session began. After the sessions were finished, participants were given a debrief sheet which explained more about the research, and provided contact details in case they had any follow-up questions, or wished to withdraw from the study at any point. All forms are available in Appendix A.

In following these steps before beginning the task itself, ethics procedures were followed in line with the British Association for Applied Linguistics guidelines. The process was approved by the University of Edinburgh Linguistics & English Language Ethics Committee, who also specifically approved the consent forms, information sheets, debrief sheet and data management plan.

Participants were set up with a laptop beside them; the screen appeared blank. The laptop unfortunately made the setting less relaxed and more experimental, but by maintaining the relaxed location, not using any more ‘intrusive’ equipment such as headphones or lapel microphones and structuring the rest of the task in a conversational style, I believe the positive qualities of the interview method were retained as far as was possible while also allowing for the standardised examples to be played for each participant.

In each session, for each example, I read out the short preceding context to the participant. All contexts ended with ‘you say:’, after which participants pressed the space bar on the laptop to hear the example sentence. Given that both Cruz-Ferreira (1989) and Jiang (2005) allowed participants to listen to stimuli multiple times, participants in this research were also allowed to repeat the sentence they had just heard by pressing the left arrow. Participants could listen to an example as many times as they liked, but once they pressed space to move on to the next example, they were unable to go back. Participants could also request that I repeat the preceding context that I had read out to them.

After they had heard the example, participants were then asked to rate the example on a scale from 1 to 5. The exact numbers used on a Likert scale often vary (usually 1-5 or 1-7) – although e.g. Greenbaum and Quirk (1970) advise again a midpoint that speakers

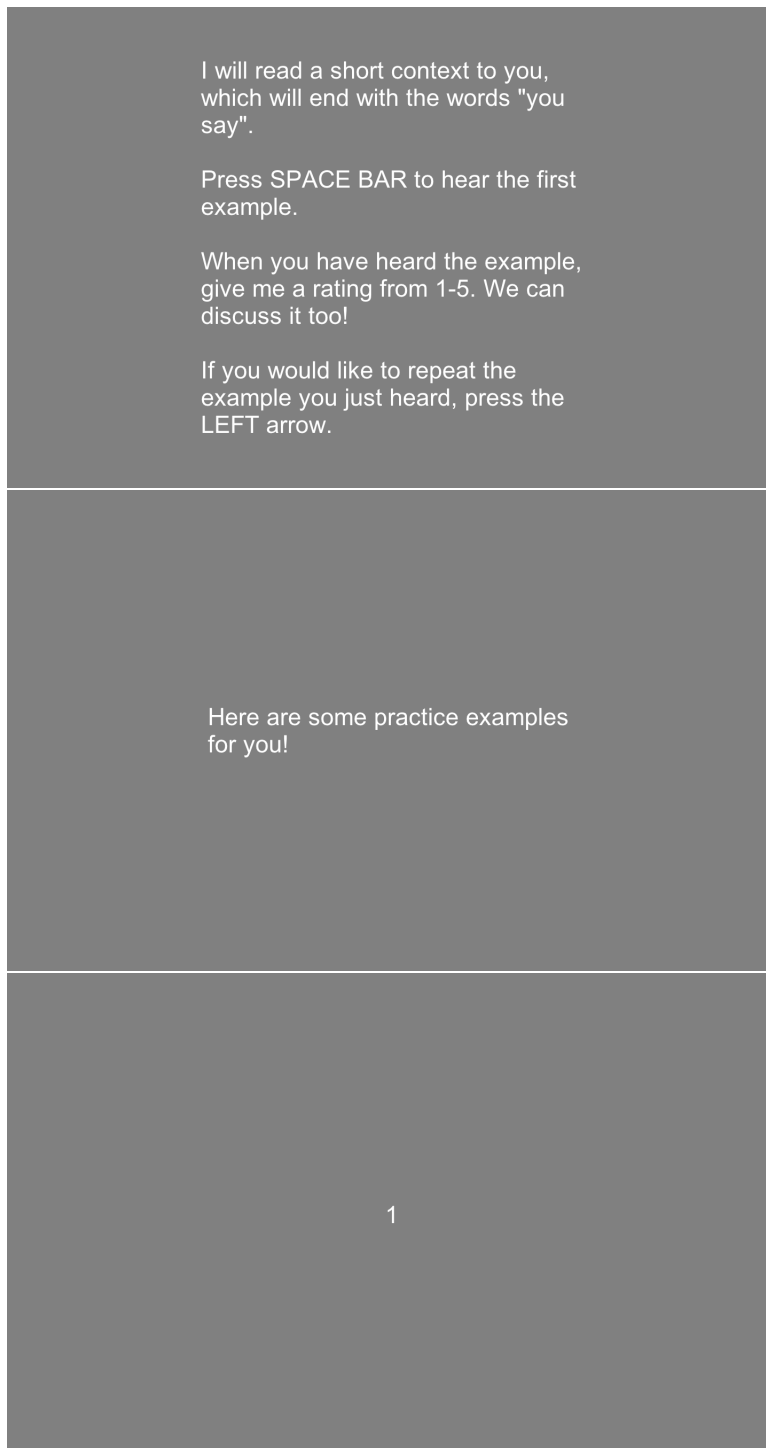


Figure 2.3: The opening three screens of the PsychoPy programme that participants used to listen to the examples. These were shown full screen. When a participant pressed space bar to hear an example, a number briefly flashed on the screen before returning to blank.

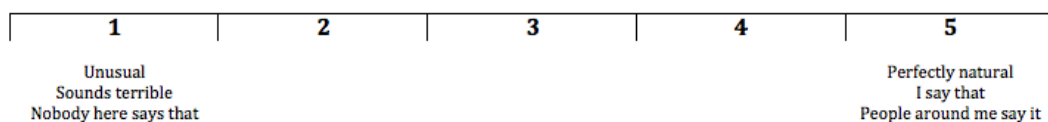


Figure 2.4: Representation of the scale that participants were given.

may treat as ‘not sure’, rather than a certain rating, best practice is generally to include a range of numbers which permits for a midpoint (Schütze 1996). However, whether these numbers should be labelled is up for debate. Cowart (p.c. to Schütze 1996:186) suggests only labelling the end points of the scale so as to avoid uneven use of the scale, though on the other hand, the SCOSYA project labelled all points of their scale (as seen in Figure 2.2) – making it clear as to what was intended by each point. In this research, I opted only to label the endpoints of the scale in order to give participants flexibility in the remainder of the scale, which could be discussed with me as the interviewer. To this end, a rating of 1 was described as ‘unusual; sounds weird; no one says that’, whereas 5 was described as ‘totally natural; I say that; people around me say that’. These labels attempted to access both the participant’s judgment of their own usage and of the rest of their community; this conflation is problematic (as will be discussed in detail in 2.5) but participants generally have opinions on both counts, and so explicitly acknowledging this can be useful. The scale was presented to participants as part of their information sheet (see Figure 2.4).

When using ordinal scale judgments, it is often recommended to have a trial period first, in order to allow participants to become familiar with the examples and the rating process (Bard et al. 1996, Schütze 1996, Cowart 1997), though Likert scales are generally taken to be fairly intuitive (Langsford et al. 2018). These examples should be like the examples in the actual study (Keller 2000) and ideally showcase the full range of potential judgments so as participants become aware that they are able to use the full scale, and are not ‘surprised’ by any stimuli.

In this research, then, participants were given three trial examples before they began the main body of the first session. As well as giving them a chance to become familiar with the rating process (described below), this warm-up period also gave them a chance to test out the PsychoPy programme and to become familiar with how to play the examples. The trial examples used were filler examples from the second session, and varied in acceptability: one example of a negative imperative was presumed to be perfectly acceptable; one example

with tag particle *right* was presumed to be of mid-range acceptability due to its falling intonation, and one involved an ungrammatical word order and was thus presumed to be unacceptable. This range of acceptability allowed me as the interviewer to discuss the use of the scale with participants and encourage them to make full use of the possible range.

As in the standard interview method, participants gave their ratings by telling me; I subsequently noted the ratings next to each example. Participants were encouraged to discuss the reasons behind their judgments, and this discussion was recorded using a Zoom microphone sitting between myself and the participant.

The two sessions for each participant were run back to back. Once the participant had rated all of the examples in the first session there was a short break, during which I would set up the second session on the laptop. There was no trial set at the beginning of the second session, and participants were free to begin the second session whenever they felt ready. Sessions varied in length depending on the participant: generally, each session took between 45 minutes and 1 hour. The second session was usually faster, and sessions with younger speakers were generally faster overall.

Participants were given a £15 Amazon voucher as a thank you for their participation.

### The participants

	Age	Gender	Location		Age	Gender	Location
GY01	29	M	Southside	GO01	73	F	Gorbals
GY02	22	F	Strathaven	GO02	56	F	Castlemilk
GY03	23	F	Paisley	GO03	58	M	Castlemilk
GY04	28	F	East Kilbride	GO04	67	F	Govan
GY05	22	F	Coatbridge	GO05	65	F	Bridge of Weir
GY06	29	F	East Kilbride	GO06	55	F	Ruchill
GY07	20	F	Strathaven	GO07	61	M	Castlemilk
GY08	30	F	East Kilbride	GO08	55	M	Castlemilk
GY09	29	M	Pollock	GO09	64	M	Castlemilk
GY10	27	M	Kennishead	GO10	82	F	Blackhill

Table 2.4: Glasgow participants’ age, gender & area of (Greater) Glasgow where they grew up

Participants were recruited through the friend-of-a-friend approach (Milroy 1980): either through existing contacts or posts shared on Facebook. In Glasgow, I only personally knew one participant; others were friends or family of acquaintances, colleagues or other participants. On the other hand, due to the insular nature of a community like Shetland and my being a part of the in-group, I knew a number of the Shetland participants personally; furthermore all but one of those I did not know

	Age	Gender	Location		Age	Gender	Location
SY01	21	F	Gulberwick	SO01	78	F	Whalsay
SY02	26	F	Lerwick	SO02	66	F	Lerwick
SY03	21	F	Cunningsburgh	SO03	72	F	Hillswick
SY04	28	F	Whiteness	SO04	60	F	Lerwick
SY05	18	F	Whalsay	SO05	69	F	Bressay
SY06	19	M	Quarff	SO06	60	F	Lerwick
SY07	20	F	Sandwick	SO07	68	M	Sumburgh
SY08	20	F	Ollaberry	SO08	65	F	Whalsay
SY09	30	M	Cunningsburgh	SO09	64	M	Bressay
SY10	18	M	Whalsay	SO10	70	M	Northmavine

Table 2.5: Shetland participants' age, gender & area of Shetland where they grew up

personally already knew of me through family or friends. This means that my status as the interviewer was different in both locations. In dialect syntax terms, the ideal would be to have someone from each community carry out each series of interviews. However, the importance of being *from the community* is heightened in Shetland – Smith and Durham (2012) show how young speakers who use Shetland dialect dramatically drop their rates of use of variants like the *be*-perfect and lexical item *ken* when interviewed by a non-local speaker as opposed to someone from Shetland. The idea of speaking ‘properly’ to someone who is not a Shetlander is such a pervasive part of life as a dialect speaker there is even a dialect word for it: ‘knappin’ (Melchers 1985, Karam 2017). Given this, it was most important that the Shetland interviewer was local. In Glasgow, effects of my non-local status were hopefully mediated to some extent by the fact that I was Scottish, and the fact that the actual sentences the speakers were judging were recorded by a Glasgow Scots speaker, as described above. Of course, there may still have been some wariness that participants did not vocalize and this should be kept in mind.

In both Glasgow and Shetland, 10 participants aged 18-30 and 10 participants age 55+ were recruited. This gave a total of 20 participants per community, and 40 participants overall (as shown in Tables 2.4 and 2.5). These groupings permit comparison between the two communities as wholes, but also to view any apparent time changes that are ongoing in the community – particularly in Shetland, where there is rapid dialect levelling taking place in younger generations (Smith and Durham 2011, Sundkvist 2011, Smith and Durham 2012). 55 was chosen as the cut off point for the older age group as this was the point at which Kevin Stadler (p.c.) found that speakers started behaving differently in Shetland with regard to acceptability of verb raising in questions based on the data in Jamieson (2015).

Participants had to meet two criteria, with an additional third which was less important, but also taken into consideration.

- Participants had to have been born and brought up in the community in question (Glasgow or Shetland).
- Participants could not have spent any significant portion of time living outside of their community.
- I asked where participants' parents were from. This was not necessarily a deciding factor: those whose parents had both also been born and raised in the community were preferred, but a handful of exceptions were made where only one parent was born and raised in the community, but the participant met the other criteria.

These criteria help to narrow down the participants to those with *dense, multiplex* networks within the community (Milroy 1980). These are thus participants who are embedded within community life and likely to be dialect users. Each of the three factors is important in its own right: firstly, being born and brought up in the relevant community gives speakers access to a peer group who are likely users of the variety. Secondly, not spending any significant time living outside of the community reduces the likelihood of contact with other varieties and the need to accommodate by being in a minority. Finally, parents (or other guardians/early caregivers) are traditionally held to be the most important inputs into a child's language acquisition process, with children acquiring their parents' variation (Labov 2001). Having parents who are from the community therefore puts speakers in a strong position to have acquired the local variety.

Given my insider status in the Shetland community, the three questions above were generally enough to establish whether a potential participant was suitable for the research. However, as I had less insider knowledge within the Glasgow community, I asked potential participants from Glasgow in advance if they would use any of the following four phrases:

- i) They books / Them books is old.
- ii) Gonnae no forget!
- iii) She would come, wint she?
- iv) *You're looking for a pen and then you find it: Here it's!*

These four constructions have been highlighted in the literature (Thoms et al. 2013, Weir 2012) and by the ongoing SCOSYA project as being used in the Glasgow area.



Speakers using these features, therefore, were likely to use the relevant *-int* feature. As long as a participant self-reported usage of (iii) and at least one other of the features, as well as meeting the relevant social criteria, they were accepted for the data collection process.

### 2.4.3 Data analysis

Participants' basic information forms and consent forms were stored securely, and all recordings / data about the participants stored were anonymized, and referred to by a participant ID number only, which incorporated the location and age group (e.g. GY05 = participant 5 in the Glasgow 18-30 group, SO03 = participant 3 in the Shetland 55+ group).

The ratings given by participants were input into .csv files, stored by participant ID number only.

Comments given by participants on individual examples (e.g. what they would use instead, or people they associated use of the example with) were collated in a .csv file, and were coded for the type of construction, the exact example, any alternative if given, as well as the age group of the participant. In the Glasgow data, 898 comments were coded in this way. In the Shetland data, 1150 comments were coded in this way.

	A	B	C	D	E	F	G	H	I	J
1	PARTICIPANT	AGE	TYPE	NUMBER	PREFERS	PREFERS TYPE	COMMENT			
680	GY04	Y	PNZ	PNZRB3	biased question	BQ				
681	GY04	Y	PNZ	PNZRS1	wint you	INT				
683	GY04	Y	NNX	NNXFB2	CMNT	N/A	older brother would say this			
684	GY04	Y	NNX	NNXRB1	CMNT	N/A	"too forceful"			
685	GY04	Y	PNX	PNXRS1	CMNT	N/A	would use more of a statement, rather than a q			
686	GY04	Y	PNZ	PNZFS1	CMNT	N/A	tag was bad			
687	GY04	Y	WH	WHONT2	didn't	N/T	older brother would say this			
688	GY04	Y	QNX	QNXFB3	can you no	NO				
689	GY04	Y	QNX	QNXFT2	have you no	NO				
690	GY04	Y	QNX	QNXRB2	did you no	NO				
691	GY04	Y	QNX	QNXRB3	would she no	NO				

Figure 2.5: Example section of the file of participant comments: participant number and age were coded, alongside the general form of the construction (PNX = positive anchor tag question, neutral evidential context; PNZ = positive anchor tag question, negative evidential context; NNX = negative anchor tag question, neutral evidential context, WH = wh-question; QNX = matrix biased question, neutral evidential context), the specific example number, what the participant stated they preferred (if nothing, CMNT to signal a general comment), prefers type (coded for e.g. INT or NO constructions), and finally comment – if the participant had any explicit comments that did not relate to a specifically preferred form.

Using the participants' comments, judgments were excluded if:

- i) A participant made it clear that they were not judging the correct example – e.g. repeating *wouldn't* instead of *wint*.

- ii) It was clear that the motivation behind the rating was not to do with the test item – for example, one participant’s rating of a true negative question was excluded because they did not want *either* to be at the end; however, when asked for clarification, they said that the rest of the example was acceptable.
- iii) A participant stated that the preceding context was bad, and this was not to do with the kind of evidential bias expressed in the context.

Statistical analysis was carried out in the RStudio environment (RStudio Team 2015). Details of the exact analysis process will be provided in chapter 3.

During the analysis process, a pattern emerged in the way that participants in different age groups in the two locations appeared to be using the Likert scale for judgments. Before I discuss the results for the *-n* and *-int* particles that were the central focus of this research, I will use the results from two sets of filler examples to unpick the judgment patterns, and to provide a sociolinguistic interpretation of the patterns.

## 2.5 Sociolinguistic interpretation

As detailed in 2.4.1, the scalar grammaticality judgment methodology has been successfully used to explore syntactic patterns for many years, improving on the classic grammatical / ungrammatical (\*) binary. The interview method has subsequently proven successful for research in dialect syntax, with the ability to get at subtle points of variation between dialects and the standard. However, there has been little discussion of linguistic *change* and grammaticality judgments, despite the clear relationship between variation and change, and role of ongoing change and standardisation/levelling in dialects. Diachronic change is often investigated through corpora or apparent time interviews and/or elicitation tasks, but for particular low frequency constructions, constructions where there are many possible alternatives, or in less-studied dialects, these methods are not necessarily always feasible. Acceptability judgments, therefore, can be employed to understand variation in a change context, but care must be taken in the interpretation. This research, investigating two Scots dialects with very different cultural environments, language attitudes and relationships to variation and change, presents an opportunity to explore how speakers’ metalinguistic awareness and their relationship to an ongoing change curve (Stadler 2016) affects the way they interact with an acceptability judgment task.

In this section, I will use data from filler examples to show the general patterns based on age that appear in each community. In section 2.5.2, I will discuss how this

should be interpreted, focusing primarily on the Shetland participants who exemplify a situation if not of dialect death, then certainly of rapid, intensive attrition (Smith and Durham 2011, 2012, Sundkvist 2011). I will frame their behaviour in terms of *perceptual hyperdialectalism*, and suggest that the need to assert a local identity is driving younger speakers' judgments. The discussion in this section will set the scene for the next chapter, providing the information required to fully evaluate the results for the *-int* and *-n* particles, as well as shedding light on the current linguistic situation in Shetland.

### 2.5.1 Making use of the scale

As described in the methodology section above, participants were asked to judge each item in the research on a 5-point Likert scale. '1' was described as something that was 'unusual, sounds terrible, nobody round here would say that', while '5' was described as being 'perfectly normal, I would say it and I would hear it around me'. No particular descriptors were attached to the middle of the scale. Participants were also invited to give further comment on why they were giving particular scores, and to explain their use of the scale. This was entirely optional, and some participants chose to do this more than others; however, all participants made full use of the scale.

The ways in which participants made use of the scale varied – particularly by age within the two locations. Here I will demonstrate the pattern with two sets of filler examples – one designed to be grammatical and the other to be ungrammatical.

For grammatical examples, we will look at filler examples of positive polar questions, in situations where the speaker was not given any prior belief, and the evidential context was relatively neutral – in effect, a standard information-seeking question. Eight of these examples were included as fillers, one of which can be seen in (102).

(102) We're at the park. You decide to go and get an ice cream from the van. You say:

**Do you want anything?**

Standard positive polar questions in Scots are taken to be syntactically the same as in English<sup>25</sup>. These examples are therefore predicted to be grammatical for all participants, and indeed, that is what we find.

As can be clearly seen in Figure 2.6, where the mean ratings for the constructions are plotted by age group (x-axis) for each location, scores for positive polar questions are

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<sup>25</sup>Jamieson (2015) shows that there are remnants of verb raising in questions in Shetland; however, *do*-supported questions were preferred by speakers in all age groups. No such evidence has been attested for Glasgow since *sees tu?* (lit. 'see you?', 'do you see?') was a shibboleth of Paisley speech in the late nineteenth century (Beal 1997:346).

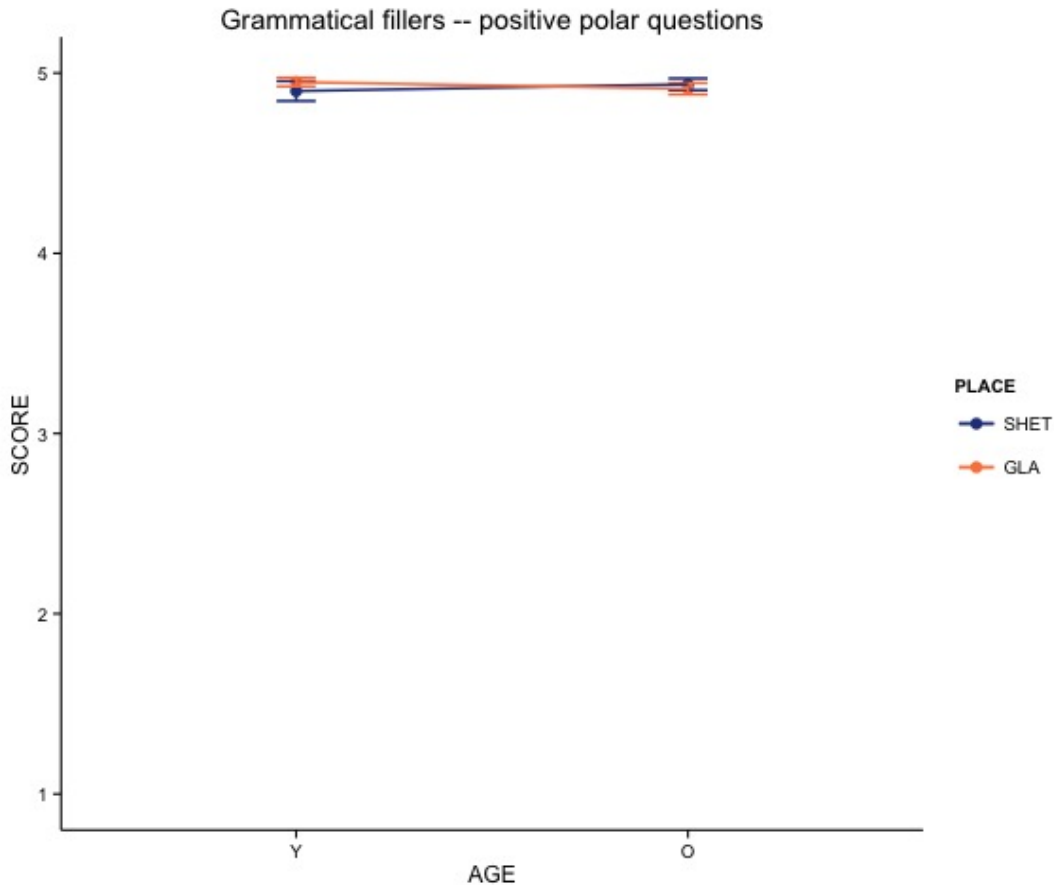


Figure 2.6: Mean acceptability of positive polar questions in Glasgow and Shetland, by age.

at ceiling for participants in both age groups in both locations. In Glasgow, the mean for the older group is 4.913, while in the younger group it is 4.95 – the difference between groups is not significant ( $t = -0.93402$ ,  $df = 148.43$ , n.s.). In Shetland, the mean rating for positive polar questions from older speakers was 4.938, while for younger speakers it was 4.9. Again, the difference between groups is not significant ( $t = 0.58593$ ,  $df = 128.08$ , n.s.). There was no effect of gender in either location.

It seems that when examples are acceptable, speakers are generally not afraid to give the highest rating. However, given the complex interactions of evidence and belief involved in the non-canonical questions in this research, as well as the numerous possible forms of question that are available in these situations (e.g. matrix biased questions, tag questions, rising declaratives, invariant tags...), the examples investigated may not be as clear cut in their acceptability as the standard information-seeking questions seen here. I therefore take a combination of two factors to indicate acceptability:

1. a **mean** rating **between 4 and 5**; and
2. a **median** rating of **5**

These criteria capture the ‘ceiling effect’ of Bader and Häussler (2010), in which examples that are acceptable are rated at ceiling (e.g. the median rating of 5), but allowing for some flexibility with regard to the potential for alternative variants in any given context, varying interpretations of belief strength etc (e.g. the mean rating between 4 and 5). Examples which fit only one of the criteria, or which fall just outside the boundaries, will be discussed on a case by case basis.

The picture is more complicated for ungrammatical examples at the other end of the scale. I will demonstrate this with examples of *do no* in negative imperatives. Recall from section 2.3.1 that unlike English negative imperatives where both *don’t* and *do not* are able to be used (Potsdam 1996, Rupp 2003), negative imperatives in Scots do not permit both options. Only *dunna* or *dinnae* (depending on location<sup>26</sup>) is available; *do no* is unacceptable (Weir 2012, Thoms et al. 2013).

(103) *Dinnae* smoke in here!

(104) \**Dae no* smoke in here! (Weir 2012:9)

As ungrammatical filler examples, each participant judged four examples of negative imperatives which were constructed with *do no* in place of *dunna* or *don’t*, such as (105).

(105) I have just arrived at your house and I’m really hungry. There’s some fresh scones sitting out, and I’m eyeing them up, but you say:

**Do no touch them! They’re for later.**

As expected from the literature, speakers in both areas in both age groups did not rate these examples in the ‘grammatical’ range, as set out above. However, despite the fact that speakers did not consider these constructions acceptable, there were significant differences in the ratings between the age groups in both communities.

This can be seen in Figure 2.7, where again the mean ratings for the construction are plotted by age group (x-axis) for each area. The first thing to note is that these mean ratings are low. However, there are statistically significant differences with respect to *how* low the constructions are rated.

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<sup>26</sup>Recall too that Glasgow does not have either of these forms, and so uses *don’t* in negative imperatives (Thoms et al. 2013).

Younger speakers in Glasgow in particular judge these examples extremely low. While older Glaswegian speakers have a mean rating of 2.775, it is still significantly higher than that of the younger speakers, at 1.275 ( $t=7.1349$ ,  $df=51.826$ ,  $p > .001$ ). In Shetland, the mean for younger speakers (2.75) is fairly comparable with the Glaswegian older speakers, but is significantly higher than that of the older Shetland speakers, who gave a mean rating of 2.00 ( $t = -2.5448$ ,  $df=76.255$ ,  $p = .013$ ). There was no effect of gender in either community.

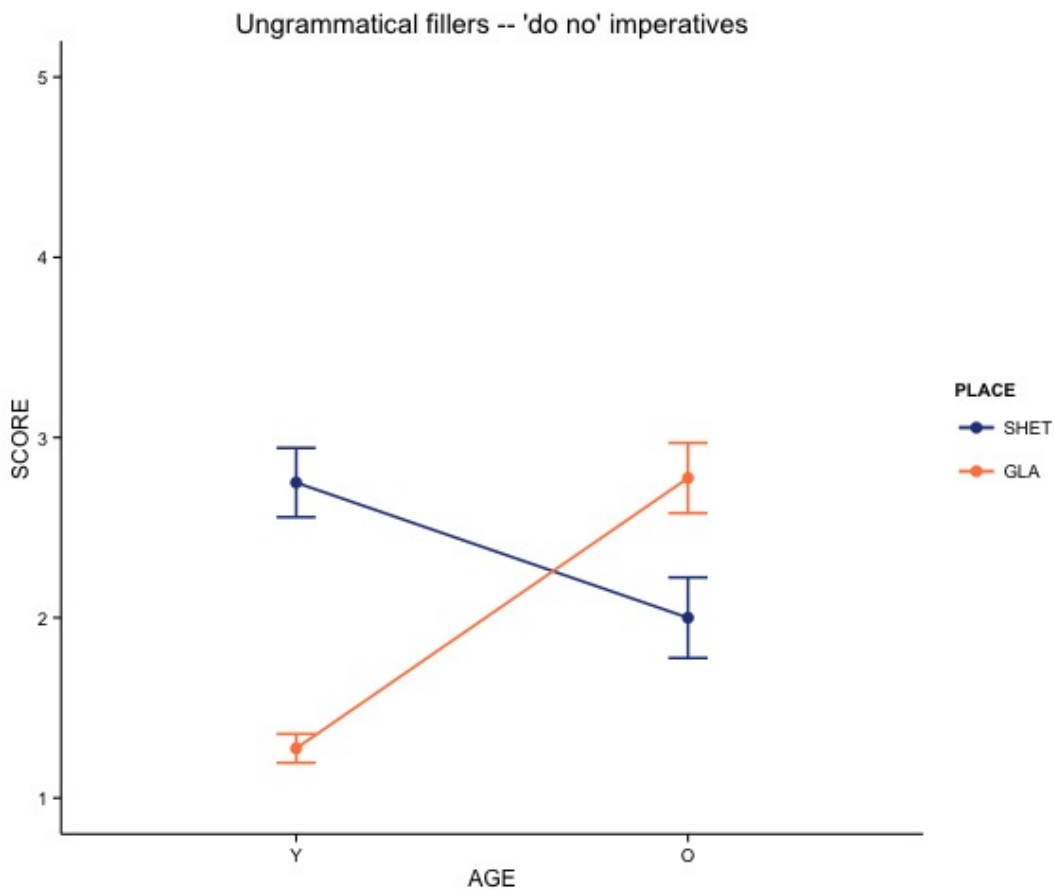


Figure 2.7: Mean acceptability of *do no* imperatives in Glasgow and Shetland, by age

So, while grammatical examples are effectively at ceiling – and are thus fairly easy to interpret – it’s not so straightforward for unacceptable examples. Speakers seem to respond differently based on their age group within the area. Why is this?

The obvious interpretation would be to say that these speakers reject these variants to different extents – and to some degree, this is true. However, I believe there is more to it than that, particularly in Shetland, where the importance of identity is heightened (Giles and Billings 2004). In the next section I will interpret this in order to set up the background for the non-canonical question analysis in chapter 3.

## 2.5.2 Changing dialects, changing interpretations

In this section, I firstly provide a brief analysis for the behaviour of the Glasgow participants. The Glasgow results add to the growing body of work on age and sociolinguistic perception (Drager 2011, Carrera-Sabaté 2014, Lawrence 2017) where younger speakers exhibit greater metalinguistic awareness of particular variants or more nuanced sociolinguistic indexing, with older speakers ‘overcompensating’. I thus extend this literature by demonstrating this pattern of behaviour in acceptability judgments.

Secondly, I consider the behaviour of the Shetland participants, tying it to *hyperdialectalism*. *Hyperdialectalism* is defined as a form of *hyperadaptation* (Labov 1972b), where, in the face of an intensive period of language contact and thus a perceived threat to their way of speech, speakers become ‘hyperlocal’. I argue that rather than reflecting hyperdialectal *usage* (Trudgill 1986, Wolfram and Schilling-Estes 1995, Britain 2009, Smith and Durham 2011), the younger speakers’ mid-range ratings are borne out of ‘linguistic insecurity’ (Labov 2006:318) and evidence what I term *perceptual hyperdialectalism*.

This analysis offers insights into how we understand the sociolinguistic situation in Shetland, following on from the work of e.g. Smith and Durham (2011, 2012), Durham (2014) and Karam (2017). More broadly, it taps into the metalinguistic knowledge of speakers at the end of a linguistic change.

### **Glasgow: a typical case of variation and change**

There is a continuum of variation in Glaswegian speech, from the broadest ‘slang’ (as it is often known to its speakers (Macafee 1983)) to Standard Scottish English. Broad Glasgow Scots is a stigmatised variety, both by speakers in the near vicinity (Pollner 1987) and more broadly across the UK (Coupland and Bishop 2007, Andersson and Trudgill 1990), due to assumptions that it is a ‘working class’ variety and the negative value judgments that come with this (see Skeggs (2010) for an overview). Despite this, there is evidence that Glaswegians are extremely proud of their speech – even or perhaps especially in the face of these negative perceptions about the variety in general (Braber and Butterfint 2008, Braber 2009).

The form of broad Glasgow ‘slang’ that can express local solidarity is undergoing change. Young speakers are intensifying features which are already taken to be major signifiers of Glaswegian speech (e.g. t-glottaling (Stuart-Smith 1999)); incorporating features from other varieties of English (e.g. l-vocalization (Stuart-Smith et al. 2006));

innovating new lexical items (e.g. the *pure* intensifier (Macaulay 2006)), and getting rid of others (Macafee 1994). Despite all of this change and innovation, and the fact young speakers behave differently to older speakers, these features are still taken to signal ‘Glaswegian’ speech. For example, although l-vocalization is argued to have spread through urban areas from the south-east of England, Glaswegian speakers perceive it as a local Glaswegian feature, and employ it to strengthen their identity (Stuart-Smith et al. 2007).

The relationship between all of these variables is complex, with age, gender and socio-economic class all coming into play. However, in terms of variation and change patterns, for the purposes of this research, the linguistic situation in Glasgow can be described as a relatively standard one: language changes, but does not disrupt speakers’ sense of community, or the role that language plays in that community.

In this research, younger speakers from Glasgow were fairly categorical with their judgments. Examples that were clearly acceptable were rated at ceiling level (i.e. 5). There was more variation in the ratings given to less acceptable or unacceptable examples, but on the whole, younger speakers were happy to give ratings of 1 or 2. When potential variation was explicitly discussed it was generally area that was given as the locus of variation – for example, GY01 suggested that use of invariant tag *right* was a ‘pure east end’ feature.

As we saw, older speakers patterned with the younger speakers with constructions that were clearly standard, and received ceiling judgments (i.e. 5) (see Figure 2.6). However, with ungrammatical examples, older speakers did not (in general) behave like the younger speakers in giving strongly negative judgments (i.e. at the level of 1 or 2). Although there is a clear distinction between their ‘acceptable’ ratings (5) and lesser or unacceptable ratings (less than 5), there is an unwillingness to say that ‘no-one’ says this. Instead, there is more hedging, and settling on numbers in the mid-range: 3s and 4s. It seems that participants were less willing to categorically state that any particular feature was not a feature of some sort of Glaswegian speech. Explicit comments show that the idea that ‘I wouldn’t say that, but other people might’ was pervasive among older participants.

(106) We are arranging a party and there are a few things we still need to get. I said I would get the glasses, but I seem to keep putting it off. You say:

**Kint you no get the glasses?**

(107) You are talking about a new pub in town that only opened last weekend. You are about to tell me what it is like, but before you do, you just check and say:



G010: kint kint- no you know I hear people saying that  
but maybe not me ehh four I think for that one

### You havnae been yet, hint you?

G003: I would say it's four the only thing I would  
change is the end bit [...] that's just my  
interpretation of how I would say it right

E: yeah yeah no absolutely

G003: but it may well be ninety percent of the  
population in Glasgow would say it similar to  
that and I'm- I'm no trying to talk posh it's just  
me personally how I would say things

Participant G003 was particularly insistent about the idea of other people using the features in question after the interview, strongly associating *-int* with young people and even labelling it as 'a bit neddy'<sup>27</sup>.

Innovation in language is often viewed in a negative light: Labov (2001:220), for example, finds a 'strong pattern of negative evaluation of change in progress' in Philadelphia, and older speakers' in this research did sometimes label these 'young' features as 'working class'<sup>28</sup>, despite the fact that all speakers in this research were selected to come from mainly working class areas, seen in Table 2.4. G003 did this above, while participant G010 referred to a tag with 'kint you' as 'scruffy', despite happily accepting other instances of *-int* tags. However, despite the pejorative associations that 'working class' can classically bring, how negative this association of 'broad' features with working class speakers is in Glasgow is debatable due to the solidarity that broad Glaswegian speech tends to trigger. In fact, it appears that older speakers were more permissive of these features they claim not to use than we might expect – suggesting that some form of 'Glaswegian solidarity' may be at play, as seen in Braber (2009).

The pattern seen in the grammaticality judgments in Glasgow Scots fits with and builds on current literature on metalinguistic awareness and social perceptions. Carrera-Sabaté (2014), for example, found that young women were more aware of an ongoing vowel change in the Lleidatá dialect of Catalan than older speakers were. Lawrence (2017) argued that younger speakers had greater metalinguistic awareness of the social indexing of vowel

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<sup>27</sup>'Neds' are a subgroup of (young) working class people in Scotland, often considered 'the Scottish version' of e.g. English 'chavs' or American 'white trash' (Pockele 2013).

<sup>28</sup>This may have been exacerbated by the fact the recordings for the research were produced by a younger Glaswegian man who spent some time growing up in Castlemilk, an area described as 'rough as fuck' by the speaker himself.

variants in York English than older speakers did, while Drager (2011) showed that older speakers tended to be affected more by the perceived age of the speaker in a task looking at an ongoing vowel shift in New Zealand English, in effect overcompensating and attributing more of the TRAP variant, the final result of the vowel shift, to younger looking speakers.

The literature thus suggests that younger speakers have greater metalinguistic awareness of ongoing changes, and are able to more accurately apply them to non-age-based social cues. In the acceptability judgment results presented here, it appears that something similar is happening with the older speakers in Glasgow. While younger speakers have more nuanced judgments on e.g. specific pragmatic contexts (see, for example, section 3.3.3), older speakers accept the possibility of a variant – even when it's ungrammatical, as seen above.

So why did the Shetland participants pattern so differently?

### **Shetland: perceptual hyperdialectalism**

As we saw above, the umbrella of Glasgow Scots incorporates considerable ongoing change, with young people strengthening or adding certain features, and losing other, more traditional ones. How, then, does it differ from Shetland, a variety where change has also been well documented (Melchers 1985, van Leyden 2004, Melchers and Sundkvist 2010, Sundkvist 2011, Smith and Durham 2011, 2012, Jamieson 2015, Karam 2017)? In this section, I will take the position that the difference is one of attitude and 'linguistic insecurity' (Labov 2006:318), leading to something which I will term 'perceptual hyperdialectalism'.

In situations of hyperdialectalism, speakers become 'hyperlocal' (Labov 1972b). This may be exhibited in a number of ways: for example, speakers may extend the potential contexts for use of a feature, losing e.g. pragmatic distinctions, or adopt what was traditionally a minority variant so as it becomes categorical in a limited number of cases, despite general loss. In effect, they make themselves 'more' local in specific contexts, while losing the environmental distinctions that may have once restrained production (Trudgill 1986, Wolfram and Schilling-Estes 1995, Britain 2009). There is also the potential for *statistical* hyperdialectalism (Wolfram and Schilling-Estes 2006:275), where speakers do not extend contextual uses but simply increase the usage of a particularly salient feature.

Hyperdialectal speech is recorded in young speakers' production data in Shetland by Smith and Durham (2011). Demonstrative distal *yon* is a particularly clear case, though

other syntactic and phonological features also showed similar patterns. *Yon* participates in a distal deictic system in Shetland dialect alongside *this* and *that*. There are disagreements in the literature about exactly which distal contexts permit use of *yon* (see Robertson and Graham (1952), Melchers (1997) for different possible combinations) – however, regardless of which semantic or pragmatic environments it is posited to be used in, it is understood to be a marginal form, limited contextually.

There were generally low rates of *yon* across the three age groups that Smith and Durham investigated, but surprisingly, there was more usage in the younger group than the middle or older groups. Looking at this between speakers, however, only four of the eight younger speakers used any *yon* at all. Furthermore, two in particular were extremely prolific users, with around 36% *yon* usage - compared to < 20% with the older and middle groups – thus bumping up the overall younger speakers’ mean usage rates.

Syntactically, the younger speakers follow the same patterns of use with regard to whether *yon* is a determiner or pronoun – with more use as a determiner – as the older and middle speakers, but with larger percentages of overall use. Smith and Durham do not investigate the semantic or pragmatic contexts where speakers produce *yon* – so it may be the case that there is contextual extension. Nevertheless, it seems clear that some speakers are employing *yon* in a hyperdialectal way Smith and Durham’s data, whether it is purely statistical or involves some structural extension.

Given this evidence, Smith and Durham (2011) conclude that Shetland dialect may be obsolescing, at least in Lerwick, with other recent articles reaching similar conclusions (van Leyden 2004, Melchers and Sundkvist 2010, Sundkvist 2011, Durham 2014) – though Karam (2017) is slightly more optimistic.

Outside of academia, reports of dialect death in the community itself have been ongoing for considerably longer – perhaps centuries<sup>29</sup>. Local literary magazine *The New Shetlander* in 1962 – following the introduction of television to the isles, but prior to the population increases caused by the development of the oil industry in the 1970s – printed an editorial stating that ‘for over a hundred years, there’s been talk of the death of the dialect’, going on to challenge those claims by stating ‘while there’s a Shetlander alive to *showe a neep* [‘chew a turnip’] it should continue’.

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<sup>29</sup>These century-old reports of ‘dialect death’ may be conflated with the death of Norn, the West Norse language spoken in Shetland until some time after Shetland was given from Norway to Scotland as a dowry in 1469 (Barnes 1998). Karam (2017), for example, discusses how, in 1949, John Graham was only able to identify 107 of the 300 words collected by Jakob Jakobsen in his work in Shetland the 1890s; furthermore, a Shetlander in their early twenties in the late 1970s only identified 65 words. However, Jakobsen (1928) set out to document remnants of *Norn* in the isles in the late nineteenth century. Though it is debated exactly when Norn died out, even the most generous estimates (Wiggen 2002, Rendboe 1984) suggest that the last pockets of Norn were lost in the mid-nineteenth century; more conservatively, the estimate is

The attitude expressed in this editorial, that although a variety may change and may lose features that it once had, it is not dying out, mirrors the position set out for Glasgow speakers above. The attitudes expressed by the young speakers in Svenstrup (2016) also demonstrate this. Svenstrup looks at the metalinguistic awareness of young (age 14-17) German speakers living in bidialectal areas where both regional variety *Schwäbisch* and the German standard *Hochdeutsch* are spoken. During interviews, the young speakers came to an agreement that, although there is a ‘real’, authentic *Schwäbisch*, they themselves speak what they refer to as *neuschwäbisch* ‘new-*schwäbisch*’. This is further described as a *jugendsprache*, or ‘youth language’ (Svenstrup 2016:150).

Crucially, although these young speakers distance themselves from the variety spoken by the older members of their community – either denying that they speak it altogether, or claiming to speak only ‘snippets’ or in particular situations – the speakers still believe that what they themselves speak is a kind of *Schwäbisch*. They may have enregistered (Agha 2003) a new term for it, but their local identity and ties to their community are, I would argue, strengthened by this enregisterment – giving their variety its own in-group label, which is distinct and yet retains a connection to the speech of the older members of their community. In this way, the younger speakers are able to assert the many facets of their identities clearly – young, cool, urban speakers, who nevertheless speak a regional dialect.

In present-day Shetland dialect, this same enregisterment has not taken place among younger speakers, despite the fact that Wolfram and Schilling-Estes (1995:698) argue that ‘nonmainstream dialects... play a large role in the shaping of cultural identity’. Children of Shetland heritage have a generally positive attitude towards the dialect and consider it to be ‘an important facet of their identity’ (Durham 2014:303), something they are proud of. Despite these positive attitudes, Durham (2014, 2017) shows that younger Shetland speakers’ self-reported usage estimates lean more strongly towards English than dialect when compared to the children in Melchers’ (1985) 1983 corpus, even in informal, local contexts such as speaking to a friend who is also from Shetland. Stadler et al. (2016) and Stadler (2016) show that both younger and older speakers in Shetland a) identified the direction of a morphosyntactic change and b) placed themselves in relation to that change

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that Norn was lost by the mid-eighteenth century (Knooihuizen 2005, Barnes 2010). Using knowledge of remnant ‘Norn’ (vocabulary) to measure use of a more modern day ‘Shetland dialect’ does not, therefore, seem like a particularly useful exercise – however, this attitude persists at least to some extent, labelled ‘Nornomania’ by Melchers (2012) following Smith (1996). It may well be that this ongoing conflation of the loss of Norn with the loss of the Norn-influenced Scots dialect that resulted from the contact between the two varieties has intensified the discussion of dialect death and meant that it has been ongoing for such a long period.

curve, with younger speakers consistently positioning themselves ahead of the curve to a greater extent than older speakers.

Within the community, speakers of all ages playing a part in the identification of (local) people who don't speak the dialect. Older people bemoan the fact that 'young people don't speak dialect any more' – this in itself is unsurprising, given the tendency for negative perceptions of language change, but what is then interesting is that the younger speakers themselves often express the attitude that young people don't speak dialect too. Smith and Durham (2011:217), for example, quote one of the young speakers in their research who states that other than one of her best friends, her other friends 'don't have the accent at all'. In this research, in the discussion that followed our interview, I asked participant SY02 and her sister if they had any further suggestions for people I could interview. Previously SY02 had suggested that her boyfriend might take part; however, in that situation, the two of them decided that he didn't *really* speak dialect, and that if he were to complete the judgment tasks, he wouldn't be able to judge them properly – despite his Shetland lineage. Unlike the Schwäbisch speakers, these speakers do not consider the people they pick out to be speaking a different form of the same dialect – in their eyes, they are simply not speaking the dialect at all.

Furthermore, some younger speakers I approached to participate in this research (and previous research I have carried out in Shetland) expressed concern that they did not really speak dialect themselves, despite being Shetlanders who were born and brought up in the isles (with at least one, but usually two Shetland parents) and who had not spent any significant time living anywhere else. This did not happen with any older participants I approached, despite the fact that the older participants, with an average age of 67.2, were born in the mid-late 1940s and early-mid 1950s and were thus the targets of the criticism about the death of the dialect highlighted in *The New Shetlander* in the early 60s.

It seems, therefore, that an important difference between the current young generation of Shetland dialect speakers' experiences of 'dialect death' and those who have come before is that the current generation exhibit high levels of 'linguistic insecurity' (Labov 2006). Traditionally, linguistic insecurity has been defined as occurring when speakers feel 'that the variety they use is somehow inferior, ugly or bad' (Meyerhoff 2006:292). However, Preston (2013) argues that it can be seen in terms of an individual speaker's relationship to their regional standard, specifically 'when one feels that they are not able to perform the linguistic job at hand' (Preston 2013:324). Sometimes, speakers see their entire region as 'incorrect', and judge themselves because of that; however,

speakers may believe that their own area is ‘correct’, but that feel they themselves are lacking (e.g. the Michigan speakers in Preston (2013)). It is clear here to see parallels with the ‘semi-speakers’ identified by Dorian (1977, 1994) in her work on dialect death in East Sutherland Gaelic. ‘Semi-speakers’ were younger members of the community whose Gaelic was considered ‘imperfect’, though they could still make themselves understood. Older and/or more fluent members of the community would recognise these people as ‘semi-speakers’, and openly make judgments that they didn’t speak the Gaelic ‘right’. In turn, the semi-speakers were aware of their status in the community, aware of their linguistic errors, and embarrassed about their lack of language (Dorian 1994).

I argue a similar thing is happening with at least some younger speakers in Shetland – those who consider the dialect to be a part of their identity, but who are concerned about their abilities regarding the dialect, and/or who are picked out as being in some way lacking in dialect ability.

For speakers of all ages, there is a strong desire to distance oneself from people who are not members of the community in-group, known locally as *soothmothers*, a slightly derogatory term (Karam 2017) – especially in the face of the threat to cultural identity that comes with the obsolescence of a dialect (Wolfram and Schilling-Estes 1995:699). A key way of doing this is through making use of the local linguistic resources. Following Le Page and Tabouret-Keller (1985:181):

The individual creates for himself the patterns of his linguistic behaviour so as to resemble those of the group or groups with which from time to time he wishes to be identified, or so as to be unlike those from whom he wishes to be distinguished.

Aware that they do not produce certain variants, younger participants turn to what they ‘know’, or think that they know, about the linguistic features of their community – distinguishing their own usage (majority 5 ratings) with what they perceive to be possible, or overheard (majority 4 ratings). Participants back this up by making explicit their connections to the community, legitimizing their right to be making judgments. Participants would claim a variant was part of someone else’s dialect: this ‘someone else’ was always someone who could be considered to have a more ‘legitimate’ claim to the dialect than the participant themselves believed they did. Most often this meant older speakers who were family members (e.g. grandparents), but participants also referred to people from areas perceived to be more rural and thus more ‘broad’. Though in the task participants are not employing the resources in conversation, they are doing

as much as they can to preserve their in-group status through ‘knowledge’ – the issue is that this knowledge is not necessarily accurate.

To take an extreme example, participants were given three examples as ‘trial’ examples, including one ungrammatical sentence (108) to show them the wide range of acceptability that would be presented to them during the tasks, and to allow them to get into the hang of using the 1-5 scale.

Participant SY05 was one of the youngest participants at age 18, but was also from Whalsay, a particularly distinctive and reputedly ‘broad’ dialect area of Shetland (Cohen 1978, Melchers 1985, Durham 2017).

(108) I want to try out this new restaurant down the road. I ask you if it’s any good, but you say:

**I no am been yet.**

SY05: mmm no so much maybe like a three

E: three so yeah so like

SY05: like I’ve heard it but I widna say it myself

Despite the fact that the example shown in (108) is entirely ungrammatical in terms of its word order, both in standard English and in Shetland dialect, SY05 states that this is something she has ‘heard’. However, she clearly goes on to distance herself from it – ‘I widna say it myself’<sup>30</sup>.

Although the example in (108) is an extreme one, the principles that seemed to be underpinning how SY05 scored this ungrammatical trial example were a continued theme throughout the younger speakers’ rating processes.

(109) We are organising a birthday party. You have spoken to all of our friends to see if they can come, and everyone was able to come. When I ask you who is able to come to the party, you say:

**Who *can’n* come?!**

By stating that (older) members of her own family would use a variant, SY07 implicitly defends her position as an in-group member. Furthermore, in mentioning a specific area (North Roe, the northmost point of mainland Shetland) where a particular feature could be used, SY07 is marking out her perceived understanding of the dialect.

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<sup>30</sup>As the interviewer, in the face of any uncertainty about completing the task, I took the opportunity provided in the trial examples to ensure that speakers were making full use of the scale, and to understand that some things were going to be unacceptable – so in this case I pointed out to SY05 that this example (and potentially others that would follow) were not ‘meant’ to be correct, and could be scored low.

SY07: I widna use ‘can’n’, I’d say ‘wha canna come?’  
E: mmm so what would you give it  
SY07: I’ll give it a four  
E: do you think some folk might say it  
SY07: yeah cos well my auntie she’s- they stay up  
in North Roe and she’s *really broad* so she  
definitely says it and I’ve heard it from her  
and like folk around there

The results of the acceptability judgments do not seem to reflect hyperdialectal *usage* patterns, despite the fact that these are attested in the variety (Smith and Durham 2011) – young speakers are aware of their own broad usage patterns, and have the ability to analyse their own deployment of linguistic resources in order to make judgments about what they say. However, the results appear to exemplify the principles of hyperdialectalism (Trudgill 1986, Britain 2009) but within the space of perceptual dialectology. I surmise that while the younger speakers are aware that traditionally, the *-n* particle can be used in more contexts than they themselves would produce it in, they aren’t accurately able to pinpoint what those contexts are. They therefore extend the possibility of a variant to new contexts and lose the original environments for use.

Dorian (1977) discusses the ‘unreliability’ of semi-speakers’ elicitations – indeed, if we were collecting a corpus of data from these speakers, it does not seem that it would give a full picture of what the *-n* particle can, or at least could, do. However, it does not seem to me that the young Shetlanders’ judgments are *unreliable*. Interpreting their judgments, however, requires in-depth knowledge of the linguistic situation in the community, and of the fragility of identity tied up in the politics of the local dialect. Without this knowledge, and without the additional qualitative discussion that comes with the interview method, it would be easy to arrive at the conclusion that younger speakers said things that older speakers did not – however, that is not the case. The results of this research, and the suggestion of perceptual hyperdialectalism, highlight the importance of qualitative research to back up the quantitative judgments so often given in syntactic research. This is especially pressing in contexts of rapid, intensive language change.

A final note: why don’t the older Shetland speakers behave more like the older Glasgow speakers, given the general tendency for older speakers to be more permissive of ungrammatical examples in their judgments? Firstly, they do to some extent – compare the judgments given by the younger Glasgow speakers, who give the clearly low judgments in Glasgow, to those given by the older Shetland speakers. Although they are both stricter



than the other age groups in their own varieties, the younger Glasgow speakers are harsher still than the older Shetland speakers. The older speakers in Shetland, too, are more likely to give occasional 5 outliers to an otherwise unacceptable variant than the younger speakers are – as is the case in Glasgow.

However, the older speakers in Shetland are also aware of the ongoing language change and potential obsolescence of the variety. They also want to assert their identities as Shetlanders, to mark themselves out as being part of ‘the in-group’ and to accurately represent the dialect, which they perceive to be dying. This sort of pride in the variety is also found in work on obsolescing Ocracoke and Smith Island varieties (Wolfram and Schilling-Estes 1995, Schilling-Estes 1998, Schilling 2017). The major difference between the older Shetland group and the younger Shetland group is that the older speakers’ perceptions are more accurate, and less likely to be based on an approximation of what they think other, ‘more legitimate’ speakers are saying.

## 2.6 Conclusions

This section has demonstrated that there are many difficulties and variety-specific nuances that need to be taken into account when interpreting the results of a Likert scale acceptability judgment task in dialect syntax – especially in the case of language change, or, more specifically, potential dialect death. I suggested that the situation exemplified by the Glasgow judgments builds on existing sociolinguistic literature in which younger speakers are better at social indexing tasks than older speakers. I also explored the situation in Shetland, and posited that the behaviour of the young speakers was the result of something I termed ‘perceptual hyperdialectalism’. Younger speakers are more permissive because they are attempting to assert their identity as in-group members, but they do not have full command of the contextual environments that permit a feature.

Armed with this analysis, we can now move on to examine the data gathered from acceptability judgments on non-canonical questions, looking at the *-n* variable in Shetland and the *-int* variable in Glasgow.

# Chapter 3

## Scots results

### 3.1 Introduction

In order to address the overarching questions of this thesis, about the licensing of questions and the relationship between syntax and discourse, it is essential to have a full picture of the distribution of the Scots particles we are interested in. The existing claims from the literature were discussed in chapter 2 alongside the full morphological and phonological paradigms for each particle, with *-int* reported in tag questions and exclamatives only (Thoms et al. 2013) and *-n* claimed to be available in ‘interrogatives’ (Robertson and Graham 1952). Examples from chapter 2 are repeated here.

(110) Hint she just got an amazing wee voice!

(111) They wur leavin, wint they? (Glasgow)

(112) You have a standing ticket, do’n you? (Shetland)

Recall that there are examples of Shetland dialect *-n* which are very clearly different from either standard Scots *-na* negation or standard English *-n’t* negation: *can’n*, *will’n* and *do’n*. I will discuss examples with these three auxiliaries (‘clear cases of *-n*’) separately from the others, which I will refer to as ‘potentially confounded’ (primarily with standard English *-n’t*: see chapter 2 for details of the phonology of *-n*).

In the previous chapter I laid out the methodology and sociolinguistic interpretation that I employ in this research. In this section I present the results of that interview method research. Due to the different ways that different groups of participants in each area interacted with the methodology, I will mostly discuss the results for each area and its particle separately.

I will firstly present the results for the particles in **truly negative constructions**: declaratives, imperatives and true negative questions (both polar and *wh-*). The results will show that neither the Shetland *-n* particle (either in the clear or confounded contexts) or Glaswegian *-int* are acceptable in these contexts.

I will then move on to look at the particles in **non-canonical interrogatives**: matrix biased questions (in both negative and neutral evidential contexts); polar rhetorical questions; exclamatives; tag questions on positive anchors (in both negative and neutral evidential contexts), and tag questions on negative anchors (in both negative and neutral evidential contexts). The results here are more interesting and vary by context and location. They will be discussed in-depth below.

In each section, descriptive statistics are presented first in order to give an overview of how participants in each location judged the examples. Following the descriptive analysis, I used the ordinal package (Christensen 2018) in RStudio (RStudio Team 2015) to fit cumulative link mixed models (CLMM). CLMM is an extension of logistic regression designed to deal with ordered data with more than two response categories. As such, it is ideal for dealing with Likert-style judgment data, such as the data in this research, without risking the issues associated with using regular linear mixed models on non-normally distributed data. For each context, I ran models with random intercepts for participant and example number, with the relevant fixed effects. Given that there were four verbs and each verb generally corresponded to one example per construction type per context, and that there were already random intercepts for individual examples included, the models would not converge when a fixed effect for verb type was added. I thus do not discuss specific verbs as part of the model data, beyond the clear/confounded *-n* cases in Shetland dialect.

I use paired t-tests for direct comparisons, where relevant, with the Bonferroni correction for multiple comparisons when required.

The interview method allows participants to state explicit preferences in a particular context. This information is noted by the interviewer throughout, and can also provide additional information to support the quantitative data. Throughout, where relevant, I will present raw numbers of participants' explicit comments in favour of particular constructions, which may indicate an overall tendency for speakers to use a particular construction. However, as it was optional for participants to give any explicit comments beyond a simple rating, the numbers are often quite small, and so can only be taken as additional supporting evidence, rather than permitting any conclusions to be

drawn purely on the qualitative data.

No effect of gender were found in any case in either location. For that reason, gender was removed from the statistical models and will not be discussed.

No effect of intonation was found on the acceptability of the non-canonical questions where it was tested. Intonation was thus also removed from the statistical models. I will discuss this lack of effect in chapter 4.

## 3.2 Distribution in canonical clause types

### 3.2.1 Negative declaratives

In negative declaratives, participants judged examples with the local variant (*-n* in Shetland and *-int* in Glasgow), as well as examples with the (local) standard phonological variant of negation. As discussed in chapter 2, in Shetland, this is *-na* [nə], while in Glasgow it is *-nae* [ne].

#### Shetland

Examples (113) and (114) exemplify the negative declarative constructions that Shetland participants judged.

(113) I **widna** [wid.nə] think so.

(114) I **wid'n** [wi.dən] get any of them.

As can be seen in Figure 3.1, participants in both age groups rated *-na* in negative declaratives consistently highly, while *-n* received more varied ratings. *-na* received a rating of 5 in 87.5% (N=35) of examples for older speakers and 92.5% (N=37) of examples for younger speakers. Results are more mixed with the local variant. With the clearly local variant, 90% of examples (N=18) were rated 1 or 2 by the 18-30 group, while 85% (N=17) were by older speakers. With the potentially confounded variant, 60% (N=12) of examples were rated 1 or 2 by the 55+ group. Only 25% (N=5) were rated 1 or 2 by the 18-30 group, but they also gave no 5 ratings. The 18-30 group had a median rating of 3 (N=9) for the potentially confounded construction.

There is a clear difference in the ratings given to the specific variant *-n* and to the standard *-na* construction, with acceptance of *-na* and a lack of acceptance for the *-n* variant.

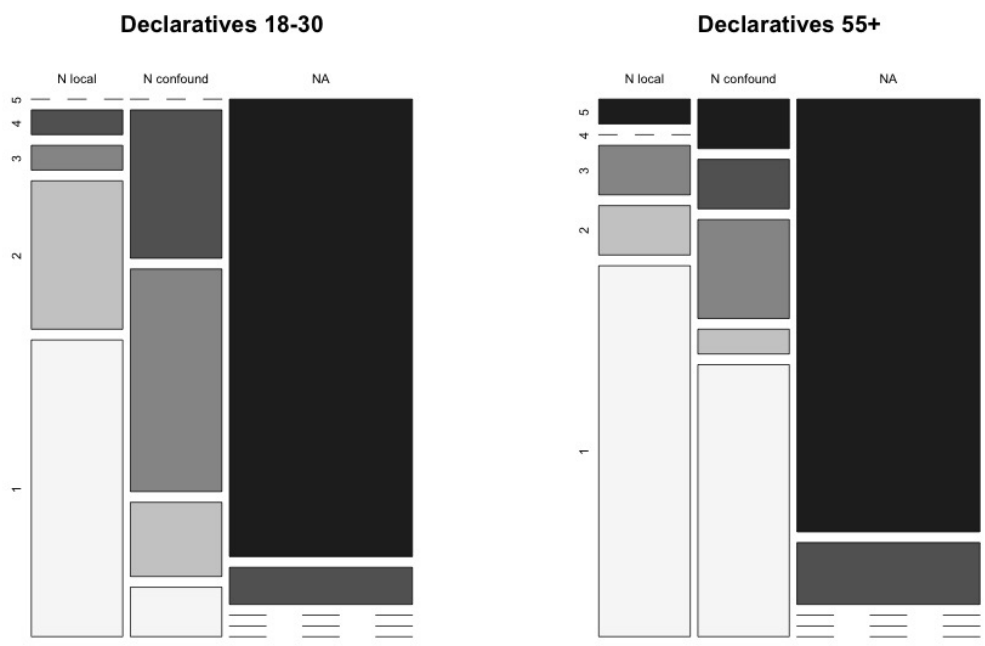


Figure 3.1: Proportions of judgments for  $-n$  and standard  $-na$  in negative declaratives, in Shetland, by age. The  $-n$  variants are divided into two groups; clearly local variants like *can'n* on the left, and those that could be conflated with the standard in the middle. Judgments run from 1-5 on the y axis.

It is interesting to note that with regards to the clear cases of *-n*, younger speakers appear to pattern with the older speakers and actually make use of the 1 and 2 ratings to a greater extent than is expected when they dislike a variant. While older speakers give relatively similar ratings to the specific local variant as they do the potentially confounded variants in this case, with a majority of 1 and 2 ratings, younger speakers – while clearly not accepting the variant, with no 5 ratings – give considerably more mid-range ratings, particularly 3s and 4s, with a median of 3 as opposed to the median of 1 in the clear *-n* case. This may be to do with the potential confound, and the possibility of interpretation as a ‘speech error’ in these contexts, as demonstrated by SO05 in the conversation below<sup>31</sup>.

(115) I say that I am thinking about getting an iPhone, and I ask you which one I should get. You say:

**I wid’n get any of them.**

S005: wid- wid- widna yeah widna get any of them that’s  
what he’s saying  
E: wid’n  
S005: wid’n  
E: yeah I wid’n get any of them  
S005: that’s just the way he’s speaking, it’s a negative  
he’s saying ‘I widna get any of them’  
E: ok  
S005: so I I I mean some folk maybe doesna say things  
right wh- what he means is ehh- ‘wid’n’ you widna  
say ‘wid’n’ but it’s a negative for all that

Running a cumulative link mixed model (CLMM) with random intercepts for participant and example showed that there was an effect of the construction type (whether *-na* or *-n*), as expected from the descriptive data. There were no effects of age; local vs potentially confounded verbs, or any interactions between these variables. The mean ratings for each construction type are thus plotted in Figure 3.2. A paired t-test further confirms that *-na* was significantly preferred to *-n* in negative declaratives ( $t(79) = 19.998, p < .001$ ).

## Glasgow

Examples (116) and (117) exemplify the negative declarative constructions that Glasgow participants judged.

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<sup>31</sup>SO05 gave the example in the declarative a 3, after comparing it with an instance of ‘wid’n’ in a rhetorical question which happened to directly follow the declarative.

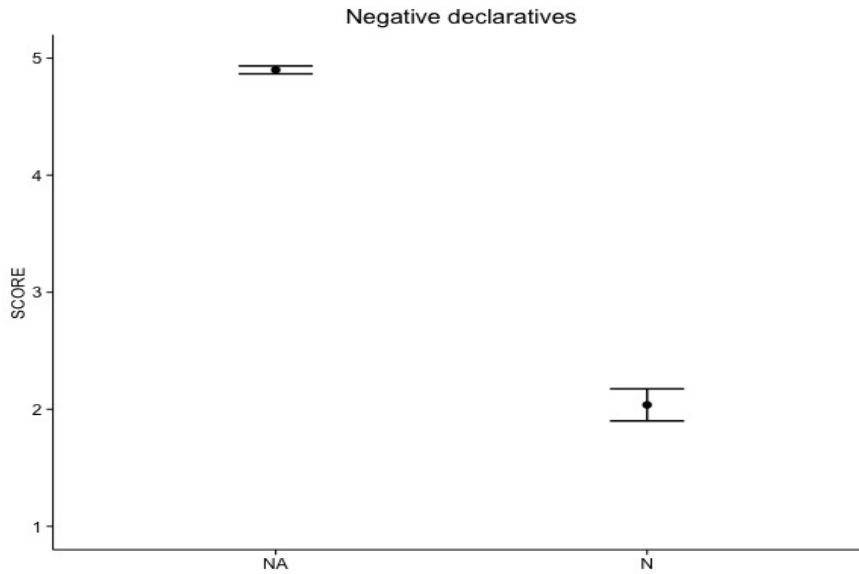


Figure 3.2: Mean ratings for *-na* and *-n* in negative declaratives in Shetland.

```

Random effects:
Groups      Name          Variance Std.Dev.
PARTICIPANT (Intercept) 0.5809  0.7622
EXAMPLE.NO (Intercept) 0.2076  0.4556
Number of groups: PARTICIPANT 20, EXAMPLE.NO 8

Coefficients:
              Estimate Std. Error z value Pr(>|z|)
int_N         -8.4812    1.5799  -5.368 7.94e-08 ***
AGEY          -0.8476    1.4096  -0.601  0.548
LOCALOTHER    -0.3309    1.3282  -0.249  0.803
int_N:AGEY     1.3050    1.5493   0.842  0.400
int_N:LOCALOTHER 1.7289    1.5856   1.090  0.276
AGEY:LOCALOTHER 2.4043    1.7994   1.336  0.181
int_N:AGEY:LOCALOTHER -1.2421    2.0333  -0.611  0.541
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
              Estimate Std. Error z value
112    -7.280      1.445  -5.037
213    -6.348      1.414  -4.488
314    -4.769      1.355  -3.520
415    -2.500      1.217  -2.055

```

Figure 3.3: Cumulative link mixed model results for negative declaratives in Shetland. There is a significant effect of construction type, but no other effects or interactions.

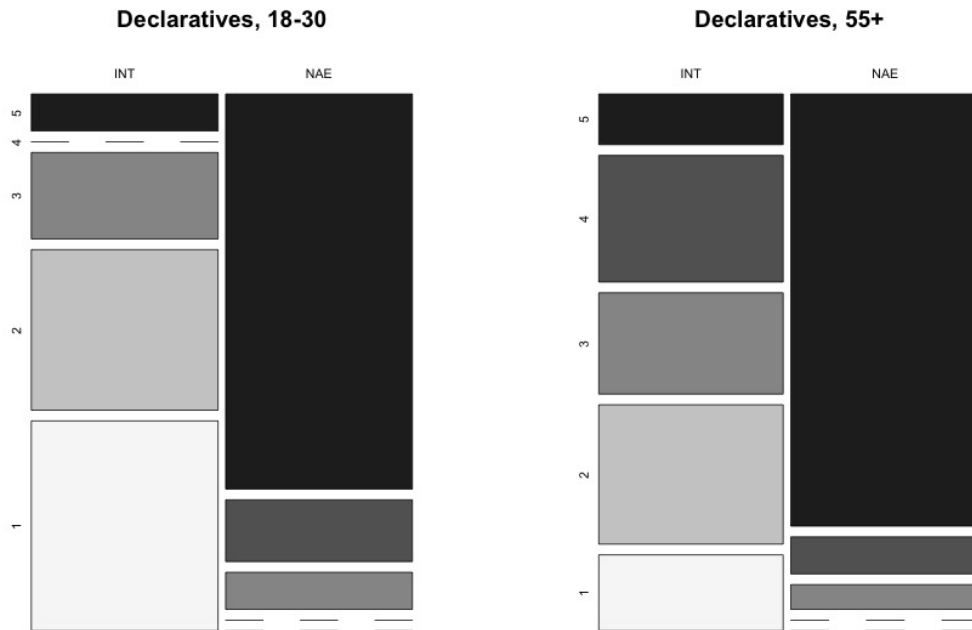


Figure 3.4: Proportions of judgments for *-int* and standard *-nae* in negative declaratives, in Glasgow, by age.

(116) I **widnae** [wid.ne] think so.

(117) I **wint** [wint] get any of them.

Participants in both age groups clearly rated *-nae* in declaratives highly, as can be seen in Figure 3.4. 87.5% (N=35) of examples were rated 5 by 55+ participants; as were 80% (N=32) of examples by 18-30 participants. On the other hand, 42.5% (N=17) of examples with *-int* were rated 1 or 2 by the 55+ group, with only 10% (N=4) rated 5; 75% (N=30) were rated 1-2 by the 18-30 group.

As was the case in the Shetland data, it is clear that the standard local form (here, *-nae*) is acceptable across the board in negative declaratives, with high percentages of 5 ratings and no 1 or 2 ratings in either age group. Furthermore, *-int* is clearly fairly unacceptable, with three quarters of examples rated by the 18-30 group receiving ratings of 1 or 2. Although older speakers gave a broader range of ratings to *-int*, this fits with their overall pattern; the percentage of 5 ratings is still small.

Running a CLMM with random intercepts for participant and example showed that there was an effect of the construction type (whether *-nae* or *-int*), as expected from the



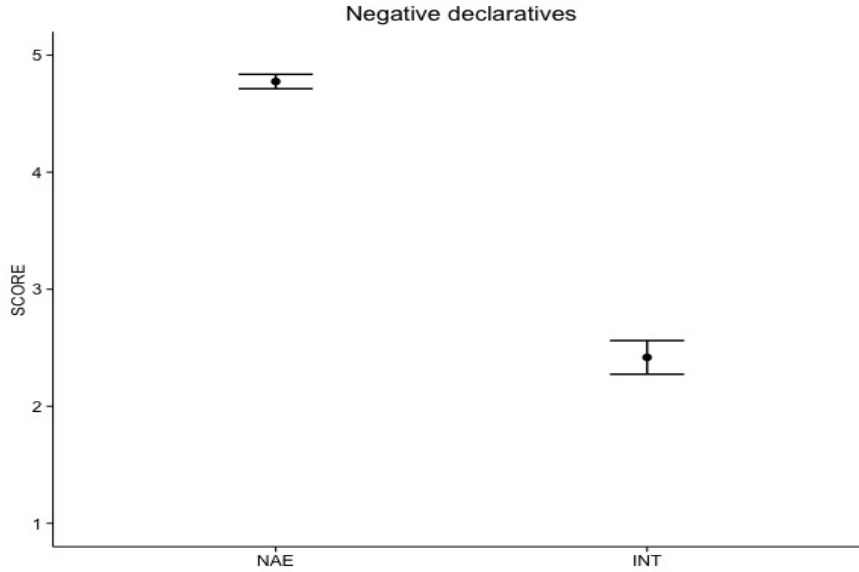


Figure 3.5: Mean ratings for *-nae* and *-int* in negative declaratives in Glasgow.

descriptive data. There were no effects of age or interaction between age and construction. The mean ratings for each construction type are thus plotted in Figure 3.5. A paired t-test further confirms that *-nae* was significantly preferred to *-int* in negative declaratives ( $t(78) = 14.7, p < .001$ ).

### 3.2.2 Negative imperatives

In negative imperatives, participants judged examples with the local variant (*-n* in Shetland and *-int* in Glasgow), as well as examples with the (local) standard phonological variant of imperative negation. As discussed in chapter 2, in Shetland, this is *dunna* [dʌ.nə], while in Glasgow it is *don't* [dɒnʔ].

#### Shetland

Examples (118) and (119) exemplify the negative imperative constructions that Shetland participants judged. Note that the form for negative imperatives with *-n* would be *do'n*, and thus it is not a confounded variant.

(118) **Dunna** [dʌ.nə] be late!

(119) **Do'n** [du.ən] bother, she's not sure if she can come yet.

As can be seen in Figure 3.7, participants in both age groups rated *-na* in negative

```

Random effects:
  Groups      Name      Variance Std.Dev.
PARTICIPANT (Intercept) 0.2406  0.4905
EXAMPLE      (Intercept) 0.3147  0.5610
Number of groups: PARTICIPANT 20, EXAMPLE 8

Coefficients:
              Estimate Std. Error z value Pr(>|z|)
intINT      -4.2496    0.7939  -5.353 8.66e-08 ***
AGEY        -0.5913    0.6785  -0.872  0.383
intINT:AGEY -0.9766    0.7776  -1.256  0.209
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
              Estimate Std. Error z value
112  -6.1978    0.8368  -7.407
213  -4.6566    0.7581  -6.142
314  -3.3299    0.6756  -4.929
415  -2.1647    0.6153  -3.518

```

Figure 3.6: Cumulative link mixed model results for negative declaratives in Glasgow. There is a significant effect of construction type, but no other effects or interactions.

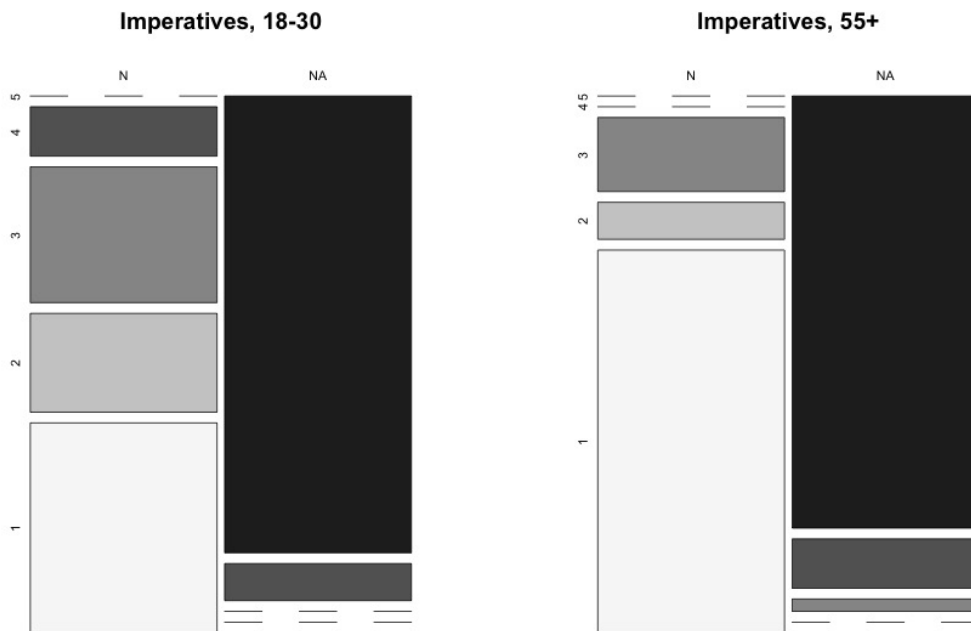


Figure 3.7: Proportions of judgments for  $-n$  and standard  $-na$  in negative imperatives, in Shetland, by age.

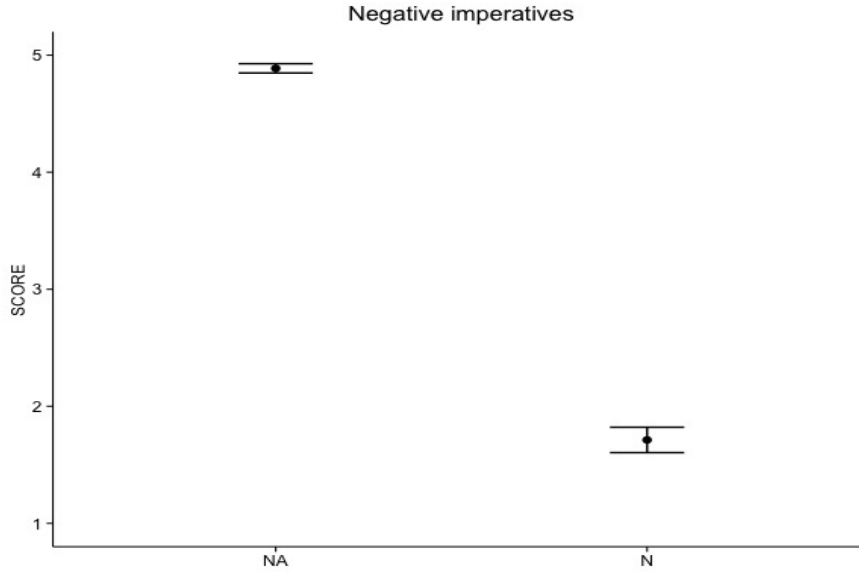


Figure 3.8: Mean ratings for *-na* and *-n* in negative imperatives in Shetland.

imperatives consistently highly, while *-n* received consistently low scores – no participant gave an *-n* imperative a 5, with 85% (N=34) of examples receiving a 1 or 2 rating from the 55+ group, and 62.5% (N=25) doing so from the 18-30 group. 87.5% (N=35) of standard *-na* examples received a 5 from older speakers, and 92.5% (N=37) did from younger speakers.

Clearly, then, the standard *dunna* variant is perfectly acceptable for speakers, with high percentages of 5 ratings for both age groups giving both a high mean and a median of 5. On the other hand, there are no 5 ratings for *do'n* imperatives in either age group, and in fact generally low ratings for those examples (especially, as expected, in the 55+ group).

Running a CLMM with random intercepts for participant and example showed there was an effect of the construction type (whether *-na* or *-n*), as expected from the descriptive data. There were no effects of age or any interaction between age and construction type. Local vs potentially confounded verbs could not be tested in imperatives, as only *do'n*, an obviously local example, was tested. The mean ratings for each construction type are plotted in Figure 3.8. A paired t-test further confirms that *-na* was significantly preferred to *-n* in negative imperatives:  $t(79) = 27.614$ ,  $p < .001$ .

```

Random effects:
  Groups      Name      Variance Std.Dev.
PARTICIPANT (Intercept) 1.8889  1.3744
EXAMPLE.NO  (Intercept) 0.4587  0.6773
Number of groups: PARTICIPANT 20, EXAMPLE.NO 8

Coefficients:
              Estimate Std. Error z value Pr(>|z|)
int_N        -10.8029   1.6419  -6.579 4.72e-11 ***
AGEY           1.1059   1.1076   0.998  0.318
int_N:AGEY    0.9989   1.0947   0.912  0.362
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
      Estimate Std. Error z value
112  -9.1056    1.5226  -5.980
213  -8.0961    1.4716  -5.502
314  -5.2685    1.2621  -4.174
415  -2.4499    0.7845  -3.123

```

Figure 3.9: Cumulative link mixed model results for negative imperatives in Shetland. There is a significant effect of the construction type, but no other effects or interactions.

## Glasgow

Examples (120) and (121) exemplify the negative imperative constructions that Glasgow participants judged.

(120) **Don't** [don?] be late!

(121) **Dint** [dint] bother, she's not sure if she can come yet.

As can be seen in Figure 3.10, *don't* imperatives scored highly in both age groups, with 95% (N=38) of examples rated 5 by 55+ and 18-30 participants. On the other hand, *dint* imperatives were rated 5 only 10% (N=4) of the time in both age groups, with the median rating in the 55+ group 4 (25%, N=10) and 1 in the 18-30 group (47.5%, N=19).

Clearly, the variant which is the standard for negative imperatives in Glasgow, *don't*, is acceptable for participants. *Dint*, on the other hand, does not fare so well, with particularly low ratings from younger speakers, and very mixed ratings from older speakers. There were very few 5 ratings at all for the *dint* imperatives, suggesting that this is not an acceptable variant for speakers of any age.

Running a CLMM with random intercepts for participant and example showed that there was an effect of the construction type (whether *don't* or *-int*), as expected from the descriptive data. There were no effects of age or any interaction between age and

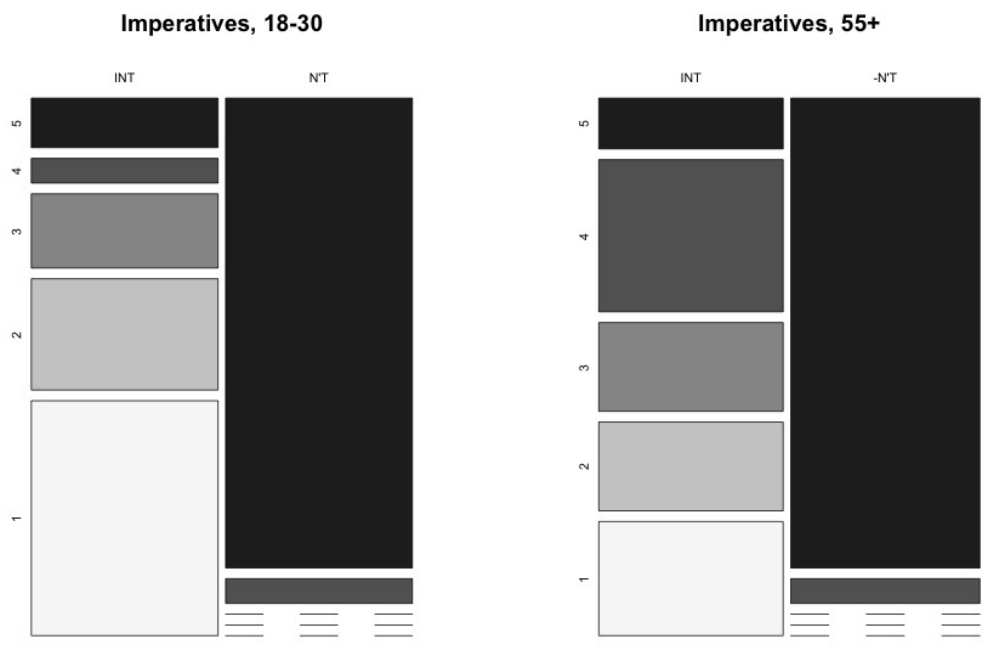


Figure 3.10: Proportions of judgments for *-int* and standard *don't* in negative imperatives, in Glasgow, by age.

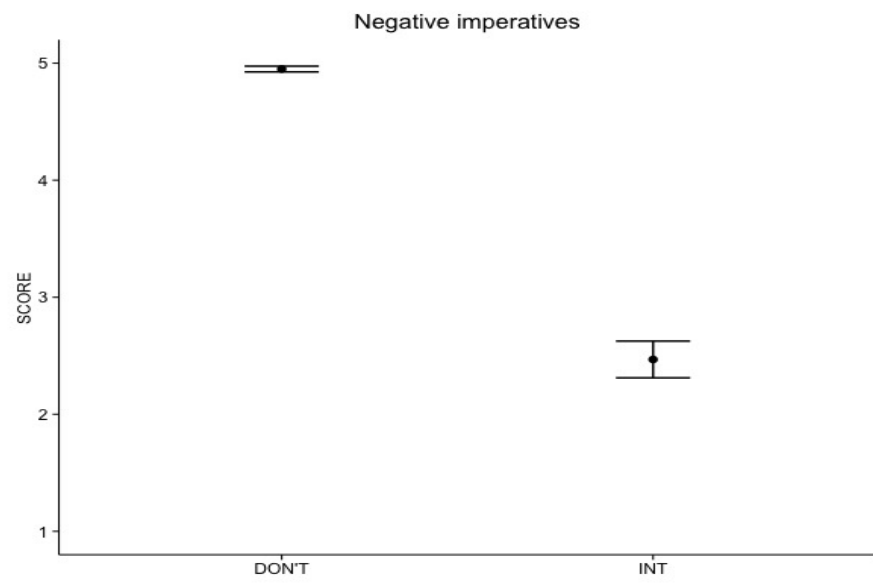


Figure 3.11: Mean ratings for *don't* and *-int* in negative imperatives in Glasgow.

```

Random effects:
  Groups      Name      Variance Std.Dev.
PARTICIPANT (Intercept) 3.4629  1.8609
EXAMPLE      (Intercept) 0.2458  0.4958
Number of groups: PARTICIPANT 20, EXAMPLE 8

Coefficients:
              Estimate Std. Error z value Pr(>|z|)
intINT        -7.409     1.280  -5.790 7.05e-09 ***
AGEY          -0.447     1.451  -0.308  0.758
intINT:AGEY   -1.196     1.288  -0.928  0.353
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
      Estimate Std. Error z value
112  -9.437     1.537  -6.141
213  -7.932     1.426  -5.562
314  -6.552     1.314  -4.985
415  -4.477     1.159  -3.864

```

Figure 3.12: Cumulative link mixed model results for negative imperatives in Glasgow. There is a significant effect of the construction type, but no other effects or interactions.

construction type. The mean ratings for each construction type are thus plotted in Figure 3.11. A paired t-test further confirms that *don't* was significantly preferred to *-int* in negative imperatives:  $t(78) = 16.133$ ,  $p < .001$ .

### 3.2.3 True negative questions

With the true negative polar questions, participants judged examples with a verb-subject-*no* (VSno) construction, the standard in both varieties, and examples with the local variant, whether that was *-n* or *-int*. *Either* was included in all the examples in order to ensure the questions were interpreted as truly negative questions, as one of the key differences between true negative questions and biased questions is negative questions' ability to license NPIs (Ladd 1981).

#### Shetland

Examples (122) and (123) exemplify the negative question constructions that participants judged.

(122) **Are you no** bought any either? / **Is du no** bought any either?

(123) **Ir'n** [ɪ. rən] you been either? / **Is'n** [ɪ. zən] du been either?<sup>32</sup>

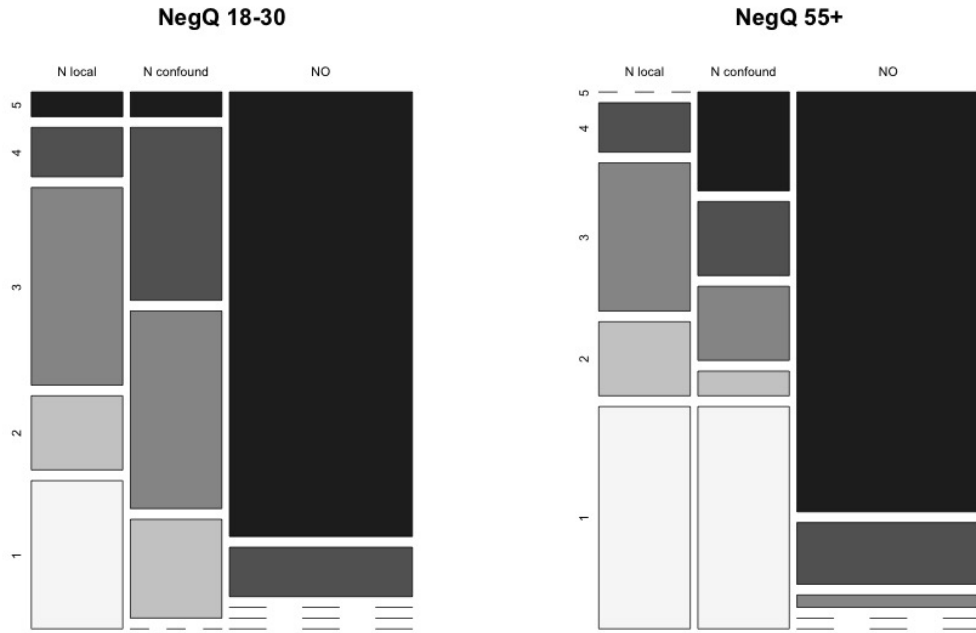


Figure 3.13: Proportions of judgments for  $-n$  (clear and potentially confounded) and VSno in truly negative questions in Shetland, by age.

As can be seen in Figure 3.13, participants in both age groups rated VSno in negative questions consistently highly – receiving 85% (N=34) 5 ratings from the 55+ group and 90% (N=36) from the 18-30 group, and no 1 or 2 ratings from either age group.

The  $-n$  variants receive considerably lower ratings. In the 55+ group, 60% (N=12) of the clearly local variants were rated 1 or 2, while 45% (N=9) of the same examples rated by the 18-30s were given 1 or 2 ratings, with only 1 example given a 5. Medians were 1 for the 55+ group and 3 for the 18-30 group.

In the potentially confounded situation, 50% (N=10) of examples were rated 1 or 2 by the 55+ group, with 20% (N=4) receiving 5 ratings. In the 18-30 group, only 20% received a 1 or 2 rating, but again only 1 example received a 5. Again, medians were 1 for the 55+ group and 3 for the 18-30 group.

Clearly, VSno constructions are acceptable as truly negative questions for the

<sup>32</sup>While younger speakers judged examples with second person pronoun *you*, older speakers were given examples with dialect variant *du*, a traditionally informal/singular second person pronoun (Melchers 1985) which takes  $-s$  agreement. On the other hand, like standard English, formal/plural *you* has  $-\emptyset$  marking. As with many features of Shetland dialect, *du* is obsolescing in the present day (Melchers 1985, Thomson 2014), and thus the decision was taken not to use it in examples that younger speakers judged. In examples with second person pronouns, therefore, older speakers and young speakers judged slightly different examples in order to make the examples as natural as possible for the speakers involved.

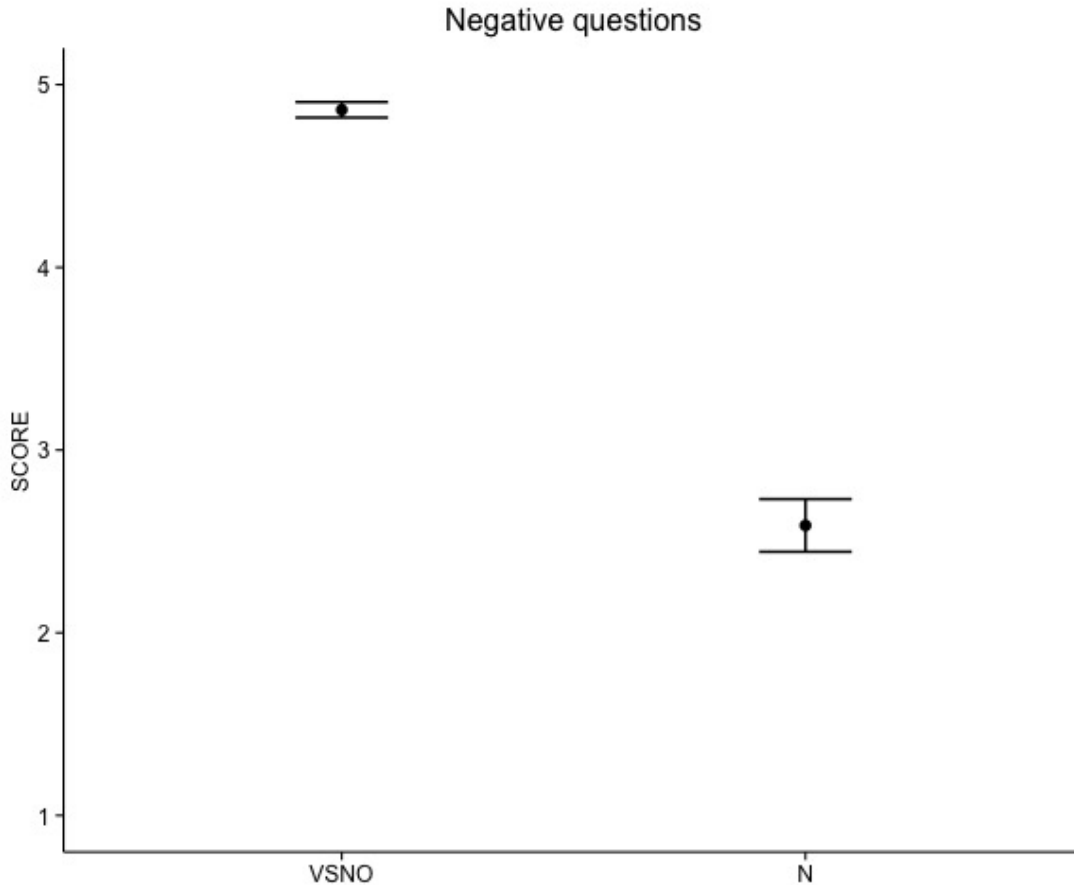


Figure 3.14: Mean ratings for VSno and *-n* in truly negative questions in Shetland.

Shetland participants of all ages. For the *-n* variant, the construction does not appear to be acceptable. This is most clear with the examples where the variant is clearly the local variant, but is also apparent with the confounded cases – though there is arguably a little less certainty about this, given 1) the lack of 1 ratings from the 18-30 group, as seen in Figure 3.13, and 2) the small number of 5 ratings from the older group. Perhaps notably, 2 of those 4 5 ratings came from one participant, as opposed to one particular example being favoured.

Running a CLMM with random intercepts for participant and example showed that there was an effect of the construction type (whether *-n* or VSno), as expected from the descriptive data. There were no effects of age, local vs potentially confounded verbs, or any interaction between the three fixed effects. The mean ratings for each construction type are thus plotted in Figure 3.14. A paired t-test further confirms that VSno was significantly preferred to *-n* in true negative question:  $t(79) = 15.288$ ,  $p < .001$ .



```

Random effects:
Groups      Name      Variance Std.Dev.
PARTICIPANT (Intercept) 4.546e-01 6.743e-01
VERB       (Intercept) 3.882e-12 1.970e-06
Number of groups: PARTICIPANT 20, VERB 4

Coefficients:
                Estimate Std. Error z value Pr(>|z|)
intNO           6.3527    1.0204   6.226 4.8e-10 ***
AGEY            0.6389    0.6567   0.973  0.331
LOCALOTHER     0.8850    0.6439   1.375  0.169
intNO:AGEY     19.8756   342.4640  0.058  0.954
intNO:LOCALOTHER -1.7863    1.1541  -1.548  0.122
AGEY:LOCALOTHER  0.3009    0.8443   0.356  0.722
intNO:AGEY:LOCALOTHER -20.7445  342.4639  -0.061  0.952
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
                Estimate Std. Error z value
112  -0.1693    0.4847  -0.349
213   0.5400    0.4876   1.107
314   2.1465    0.5469   3.925
415   3.9380    0.6604   5.963

```

Figure 3.15: Cumulative link mixed model results for true negative questions in Shetland. There is a significant effect of the construction type, but no other effects or interactions.

## Glasgow

Examples (124) and (125) exemplify the negative question constructions that participants judged.

(124) **Have you no** bought any either?

(125) **Hint** [hmt] you been either?

As can be seen in Figure 3.16, VSno in negative questions was rated highly by both groups with 64.1% (N=31) 5 ratings from the 55+ group and 82.5% (N=33) from the 18-30 group. 31.6% (N=12) of *-int* examples received 5 ratings from the 55+ group, with 36.8% (N=14) receiving 1 or 2 ratings. In the 18-30 group, 57.5% (N=23) received 1 or 2 ratings.

Truly negative VSno questions appear to be acceptable for both age groups, although this is clearer with the 18-30 group, where there are no 1 or 2 ratings. There is less certainty about *-int* in these truly negative questions in the 55+ group, with a fairly even split between 5 and 1 and 2 ratings, and a median of 5. However, the 55+ participants' mean rating remains firmly outside the 'acceptable' zone, at 3.29 (as can be seen in Figure 3.17).

Running a CLMM with random intercepts for participant and example (Figure 3.18) showed that there was an effect of the construction type (whether *-int* or VSno). There

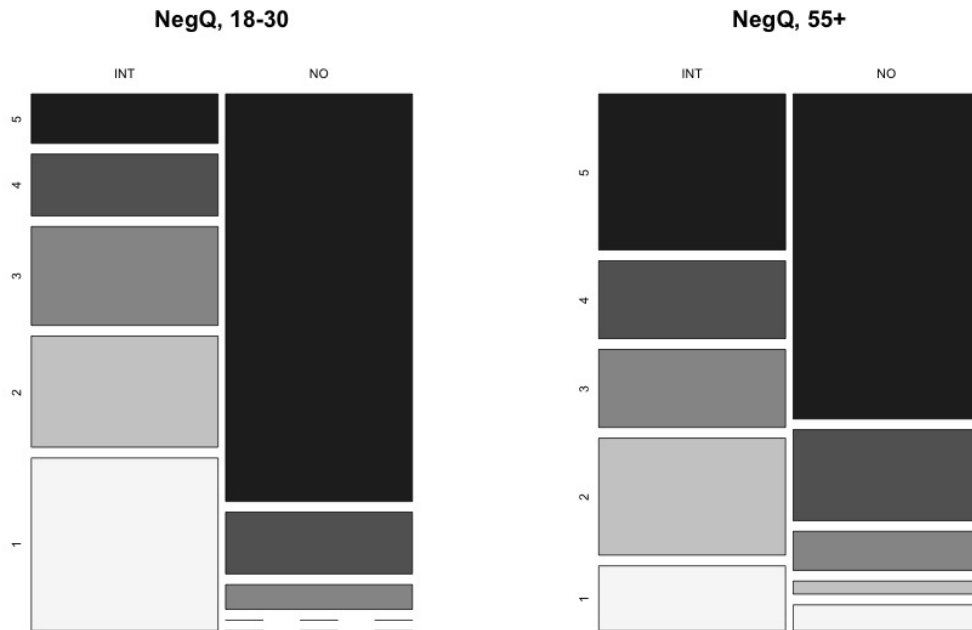


Figure 3.16: Proportions of judgments for *-int* and VSno in truly negative questions in Glasgow, by age.

was also an overall effect of age, and an interaction between age and construction type – all of which comes out from the descriptive data. The mean ratings for each construction type are thus plotted in Figure 3.17 by age group.

However, despite the interaction between age and construction type, both young and old age groups demonstrate the same pattern – significantly preferring VSno constructions to *-int* constructions. Paired t-tests show this is true for the 18-30 group:  $t(39) = -10.951$ ,  $p < .001$ . It is also true for the 55+ group:  $t(35) = -3.5045$ ,  $p = .0013$ .

### 3.2.4 True negative *wh*-questions

Participants judged both object and subject *wh*-questions; it was particularly important to make this distinction as the two have different forms in Scots. Like polar questions, negative object *wh*-questions are usually verb-subject-*no* constructions. However, although *-na(e)* is claimed to be ‘unavailable in questions’ in Scots varieties (Brown and Millar 1980, Thoms et al. 2013), subject *wh*-questions are usually formed with *-na(e)*. As well as these standard type examples, participants also judged examples with their local variant, whether that was *-n* in Shetland or *-int* in Glasgow, in both subject and object *wh*-questions.

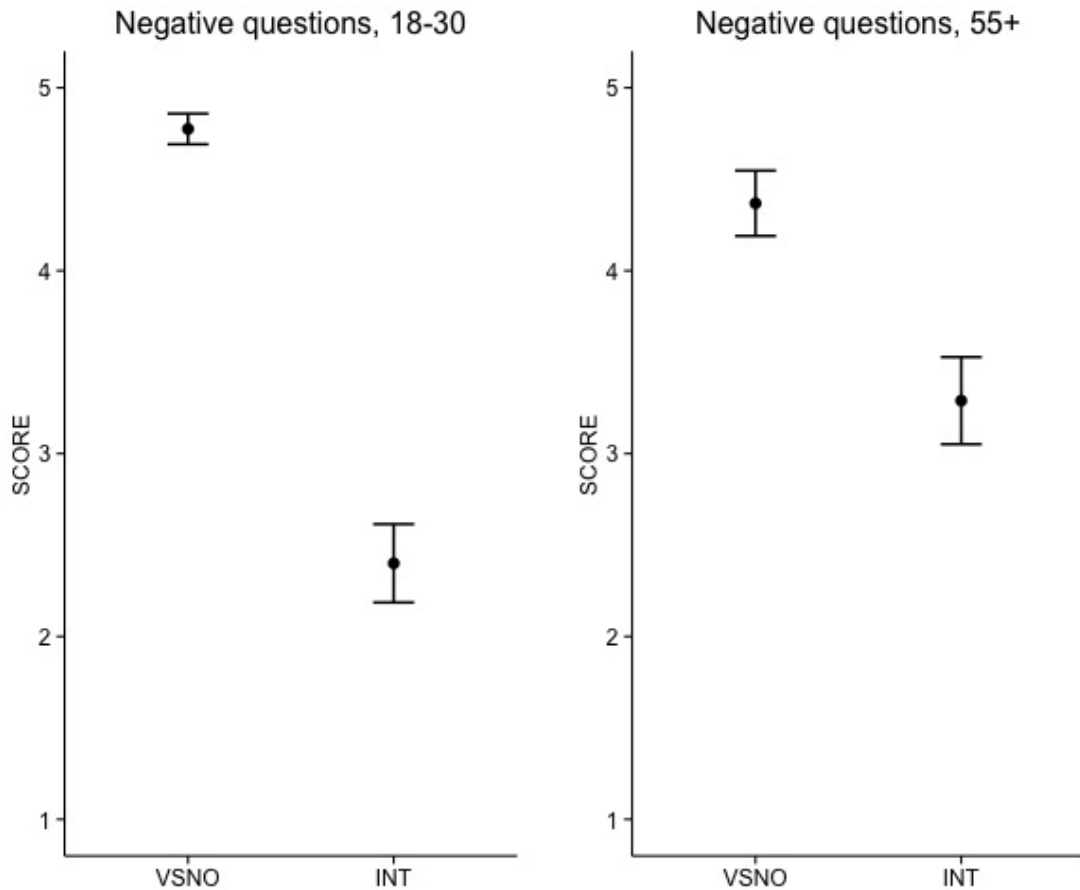


Figure 3.17: Mean ratings for VSno and *-int* in truly negative questions in Glasgow, by age.

```

Random effects:
  Groups      Name      Variance Std.Dev.
PARTICIPANT (Intercept) 1.2207  1.1049
EXAMPLE      (Intercept) 0.6171  0.7856
Number of groups: PARTICIPANT 20, EXAMPLE 8

Coefficients:
              Estimate Std. Error z value Pr(>|z|)
intNO         1.8740    0.7504   2.497 0.012513 *
AGEY          -1.4749    0.6692  -2.204 0.027518 *
intNO:AGEY     2.8798    0.7751   3.715 0.000203 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
              Estimate Std. Error z value
112 -2.267168    0.665627  -3.406
213 -1.034172    0.632499  -1.635
314 -0.001361    0.625764  -0.002
415  1.161872    0.634547   1.831

```

Figure 3.18: Cumulative link mixed model results for true negative questions in Glasgow. There are significant effects of the construction type and age group, and an interaction between construction type and age group.

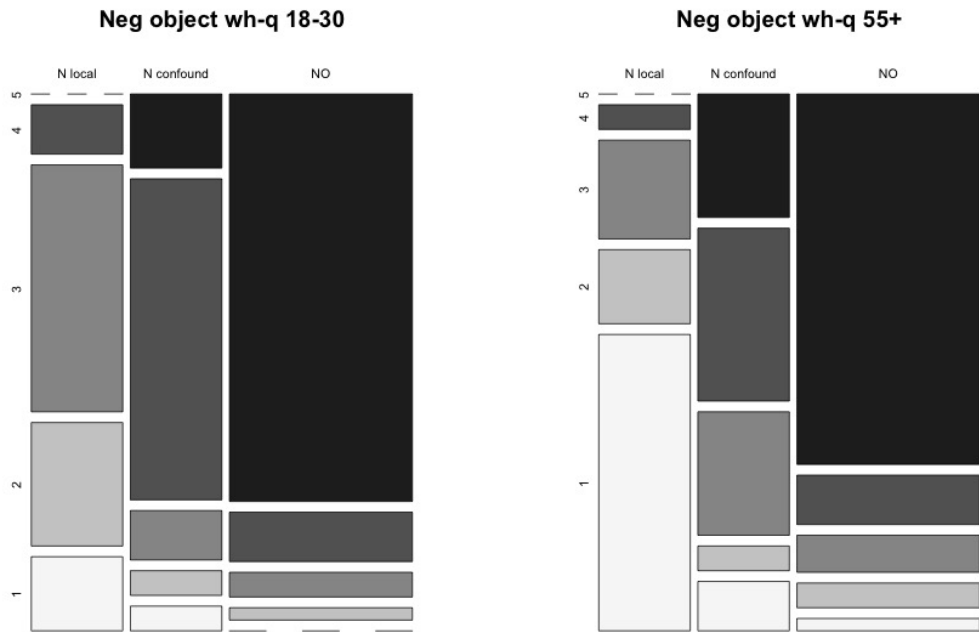


Figure 3.19: Proportion of judgments for *-n* (clearly local and potentially confounded) and for VSno in object *wh*-questions in Shetland, by age.

### Shetland

Examples (126) and (127) exemplify the sorts of object *wh*-questions that participants judged. Examples (128) and (129) show the kind of subject *wh*-questions that participants judged.

#### Object *wh*-questions

(126) What **did you no** like about it?

(127) What bit **do'n** [du.ən] you understand?

#### Subject *wh*-questions

(128) What ones **irna** been watered already?

(129) Who **is'n** [i. zən] got any yet?

As can be seen from Figures 3.19 and 3.20, the standard form of *wh*-questions, whether VSno in object *wh*-questions or *-na* in subject *wh*-questions, was rated extremely

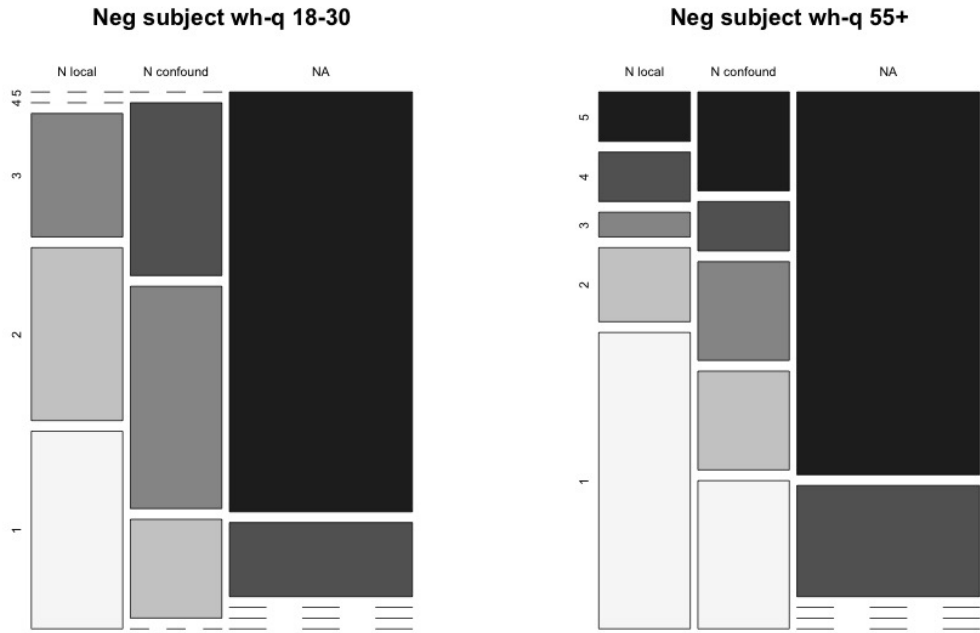


Figure 3.20: Proportion of judgments for  $-n$  (clearly local and potentially confounded) and for  $-na$  in subject *wh*-questions in Shetland, by age.

highly across both age groups — 76.25% (N=61) of standard examples received 5 ratings in the 55+ group, and 83.75% (N=67) did so in the 18-30 group.

In object *wh*-questions, the clearly local form is not accepted by either age group, with no 5 ratings at all and a median of 1 for the 55+ participants (60%, N=12) and 3 for the 18-30 group (50%, N=10).

The potentially confounded form gets more mixed ratings, with 25% (N=5) 5 ratings in the 55+ group, only 15% (N=3) 1 or 2 ratings, and a median of 4 (35%, N=7). In the 18-30 group, as can be seen in Figure 3.19, there is a clear median of 4 (65%, N=13) for the confounded constructions with younger speakers, with very few 5 (N=3) ratings or 1 or 2 (N=2) ratings.

In subject *wh*-questions, neither the local form nor the potentially confounded form received any 5 ratings from the 18-30 group, with 75% (N=15) of the clearly local form receiving 1 or 2 ratings. With the potentially confounded variant, judgments ranged from 2 to 4, with a median of 3 (45%, N=9). With older speakers, again 75% (N=15) of the clearly local examples received a 1 or 2 rating, and 50% (N=10) of the potentially confounded variant did as well. There were 4 (20%) 5 ratings.

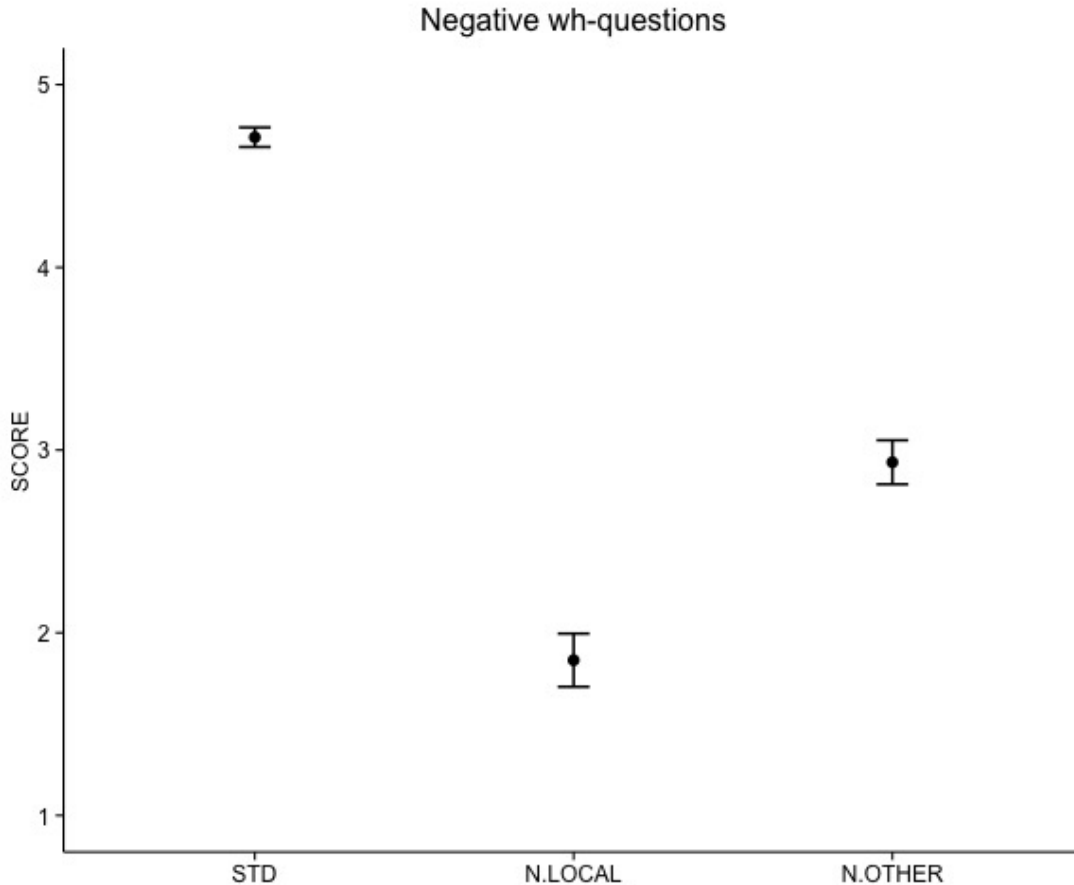


Figure 3.21: Mean ratings for standard constructions ( $-na$  in subject or VSno in object) and  $-n$  in negative subject and object  $wh$ -questions in Shetland.

The picture for  $wh$ -questions in Shetland is thus mixed. I hypothesise that with the subject  $wh$ -questions, the results are more strongly negative with respect to the acceptability or lack thereof of  $-n$  because there,  $-n$  examples are a clearer phonological divergence from the  $-na$  standard (as in declaratives, where the word order is the same but the phonology is different). With object  $wh$ -questions, if the negated auxiliary was to invert,  $-na$  would be unacceptable and while VSno is the standard, in standard English  $-n't$  would be an acceptable option. This is closer to  $-n$  (in the potentially confounded situation) and thus gets a higher level of acceptability than  $-n$  in the subject  $wh$ -questions.

I ran a CLMM with random intercepts for participant and example (Figure 3.22), as well as fixed effects for construction type (whether clearly local  $-n$ , potentially confounded  $-n$ , or the standard construction ( $-na$  in subject  $wh$ -questions or VSno in object  $wh$ -questions)), subject vs object  $wh$ -question and age. The model showed that there was a

```

Random effects:
  Groups      Name      Variance Std.Dev.
PARTICIPANT (Intercept) 0.4958  0.7041
EXAMPLE     (Intercept) 0.4997  0.7069
Number of groups: PARTICIPANT 20, EXAMPLE 16

Coefficients:
                Estimate Std. Error z value Pr(>|z|)
particleN.LOCAL -5.58166    1.11023  -5.027 4.97e-07 ***
particleN.OTHER -3.56505    0.78492  -4.542 5.57e-06 ***
SUBJOBJSUBJ     0.46709    0.75028   0.623  0.534
AGEY            0.76550    0.67754   1.130  0.259
particleN.LOCAL:SUBJOBJSUBJ -1.29327    1.56263  -0.828  0.408
particleN.OTHER:SUBJOBJSUBJ -1.31562    1.08736  -1.210  0.226
particleN.LOCAL:AGEY    0.03353    1.00726   0.033  0.973
particleN.OTHER:AGEY    0.18287    0.76481   0.239  0.811
SUBJOBJSUBJ:AGEY     -0.20268    0.85122  -0.238  0.812
particleN.LOCAL:SUBJOBJSUBJ:AGEY 0.67030    1.49047   0.450  0.653
particleN.OTHER:SUBJOBJSUBJ:AGEY -0.38003    1.09114  -0.348  0.728
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
      Estimate Std. Error z value
112  -5.4399    0.6716  -8.099
213  -4.3144    0.6434  -6.706
314  -2.8572    0.6107  -4.679
415  -1.0626    0.5756  -1.846

```

Figure 3.22: Cumulative link mixed model results for negative *wh*-questions in Shetland. There are main effects of construction type (both clearly local *-n* examples and potentially confounded *-n* examples). There were no further effects or interactions.

main effect of the construction type (both clearly local and potentially confounded *-n*). There were no other effects or interactions. The mean ratings for each construction type are thus plotted in Figure 3.21, with ‘other’ signifying potentially confounded verbs.

Although in the descriptive statistics we saw differences in the behaviour of the two age groups, and different tendencies in subject vs object *wh*-questions, the overall results do not reflect the descriptive statistics. Nevertheless, it is the case that the acceptability of the *-n* marker is higher in the potentially confounded contexts, and from the descriptive statistics, it seems that object *wh*-questions have a greater tendency to be confounded.

## Glasgow

Examples (130) and (131) exemplify the sorts of object *wh*-questions that participants in Glasgow judged. Examples (132) and (133) show the kind of subject *wh*-questions that participants judged.

### Object *wh*-questions

(130) What **did you no** like about it?

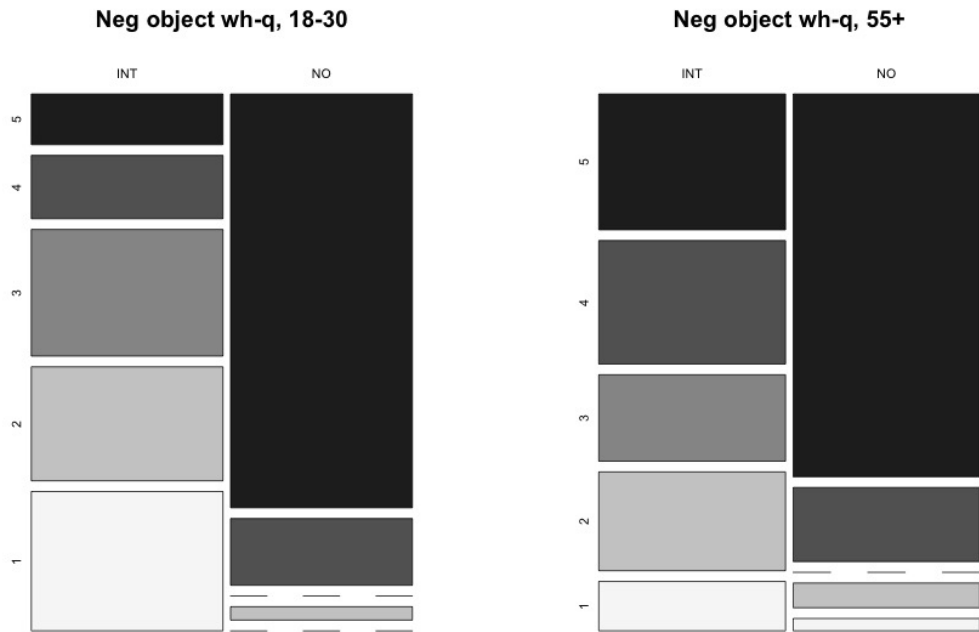


Figure 3.23: Proportion of judgments for *-int* and for VSno in object *wh*-questions in Glasgow, by age.

(131) What bit **dint** [dmt] you understand?

### Subject *wh*-questions

(132) What ones **havnae** been watered already?

(133) Who **hint** [hmt] got any yet?

As can be seen in Figure 3.23, VSno in object *wh*-questions was rated highly overall, with 77.5% (N=31) 5 ratings from the 55+ group, and 83.8% (N=31) from the 18-30 group. With *-int*, 30% (N=12) were rated 1 or 2 by the 55+ group, while 27.5% (N=11) were rated 5 (also the median). 51.3% (N=20) were rated 1-2 by the 18-30 group, with a median of 1.

In Figure 3.24, *-nae* in subject *wh*-questions is clearly rated highly, with 79.5% (N=31) of examples rated a 5 by participants in both groups. 35% (N=14) of *-int* examples are rated 1 or 2 by 55+ participants, with a median of 4 (32.5%, N=13). 60% (N=24) of *-int* examples received a rating of 1 or 2 from the 18-30 participants, with a median of 1.



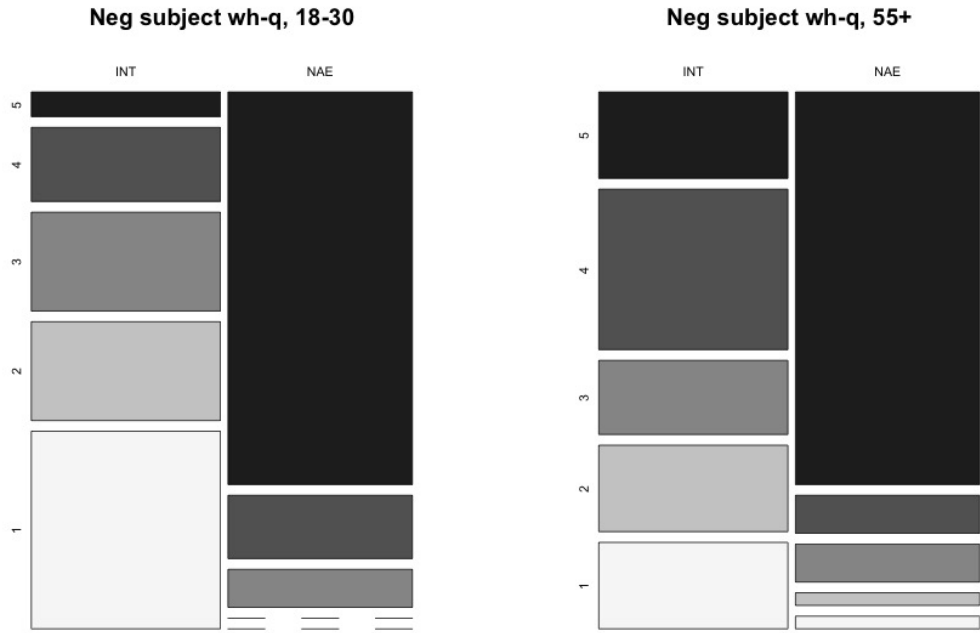


Figure 3.24: Proportion of judgments for *-int* and for *-nae* in subject *wh*-questions in Glasgow, by age.

Running a CLMM with random intercepts for participant and example (as seen in Figure 3.26) shows that there was an effect of construction type (whether *-int* or the standard construction), as clearly predicted from the descriptive data. There was also an effect of age, and there was an interaction between construction type and age. There was no effect of or interaction with subject vs object *wh*-question, despite the differences seen above in the descriptive statistics. Means are thus plotted for construction type and age, as seen in Figure 3.25.

Despite the interaction between age and construction type, both young and old age groups demonstrate the same pattern – significantly preferring standard constructions to *-int* constructions. Paired t-tests show this is true for the 18-30 group:  $t(74) = -13.977$ ,  $p < .001$ ; and also for the 55+ group:  $t(78) = -7.8769$ ,  $p < .001$ .

It seems therefore, that *-int* is not acceptable in *wh*-questions for participants in Glasgow in either age group. To some extent, it seems as though older speakers in Glasgow may have been showing similar behaviour to speakers in Shetland in object *wh*-questions, where *-nae* would not be acceptable but *-n't* (closer to *-int*) would be in standard English, and thus the results were somewhat higher for *-int* in object than subject *wh*-questions.

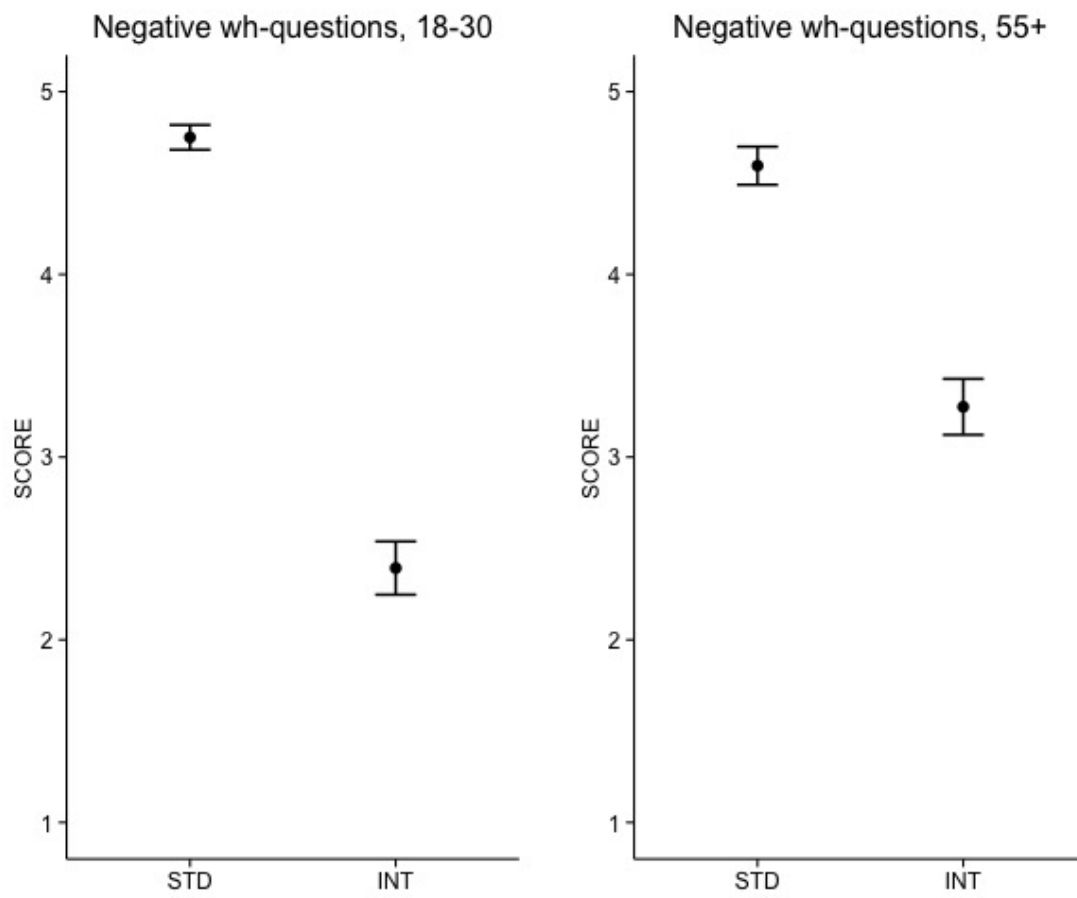


Figure 3.25: Mean ratings for standard constructions (*-nae* in subject or *VSno* in object) and *-int* in negative *wh*-questions in Glasgow, by age.

```

Random effects:
Groups      Name          Variance Std.Dev.
PARTICIPANT (Intercept) 0.6137  0.7834
EXAMPLE     (Intercept) 0.2326  0.4823
Number of groups:  PARTICIPANT 20,  EXAMPLE 16

Coefficients:
                Estimate Std. Error z value Pr(>|z|)
intSTD          2.5923    0.6190  4.188 2.82e-05 ***
SUBJOBJSUBJ    -0.2943    0.5308  -0.555 0.5792
AGEY           -1.2883    0.5455  -2.362 0.0182 *
intSTD:SUBJOBJSUBJ  0.3017    0.8563  0.352 0.7246
intSTD:AGEY      1.8158    0.7489  2.424 0.0153 *
SUBJOBJSUBJ:AGEY -0.1904    0.5775  -0.330 0.7416
intSTD:SUBJOBJSUBJ:AGEY -0.1667    1.0268  -0.162 0.8711
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
                Estimate Std. Error z value
112  -2.2716    0.4912  -4.625
213  -1.0957    0.4668  -2.347
314  -0.1211    0.4606  -0.263
415   1.2088    0.4704   2.570

```

Figure 3.26: Cumulative link mixed model results for negative *wh*-questions in Glasgow. There is an effect of construction type (whether *-int* or the standard (*-nae* in subject *wh*-questions and VSno in object *wh*-questions). There is also an effect of age group, and an interaction between age group and type of construction. There was no effect of subject vs object *wh*-question.

However, this did not come out in the statistical analysis.

When object and subject are taken together, the mean for *-int* in *wh*-questions for older speakers is 3.275, with a median of 4 (28.75%, N=23). Neither of these figures falls in the ‘acceptable’ range. I therefore take it that this is not acceptable for speakers.

### 3.2.5 Summary

In both Shetland and Glasgow, as expected, the relevant standard constructions were rated highly across age groups. Although there was some variation in the exact judgments, the local variants *-n* and *-int* scored lower across all age groups. Following the criteria set out in the previous section on what counts as ‘acceptable’ (a median rating of 5 and a mean rating between 4 and 5), at no point did *-int* or *-n* achieve an ‘acceptable’ rating in any canonical construction. I now move on to consider non-canonical constructions.

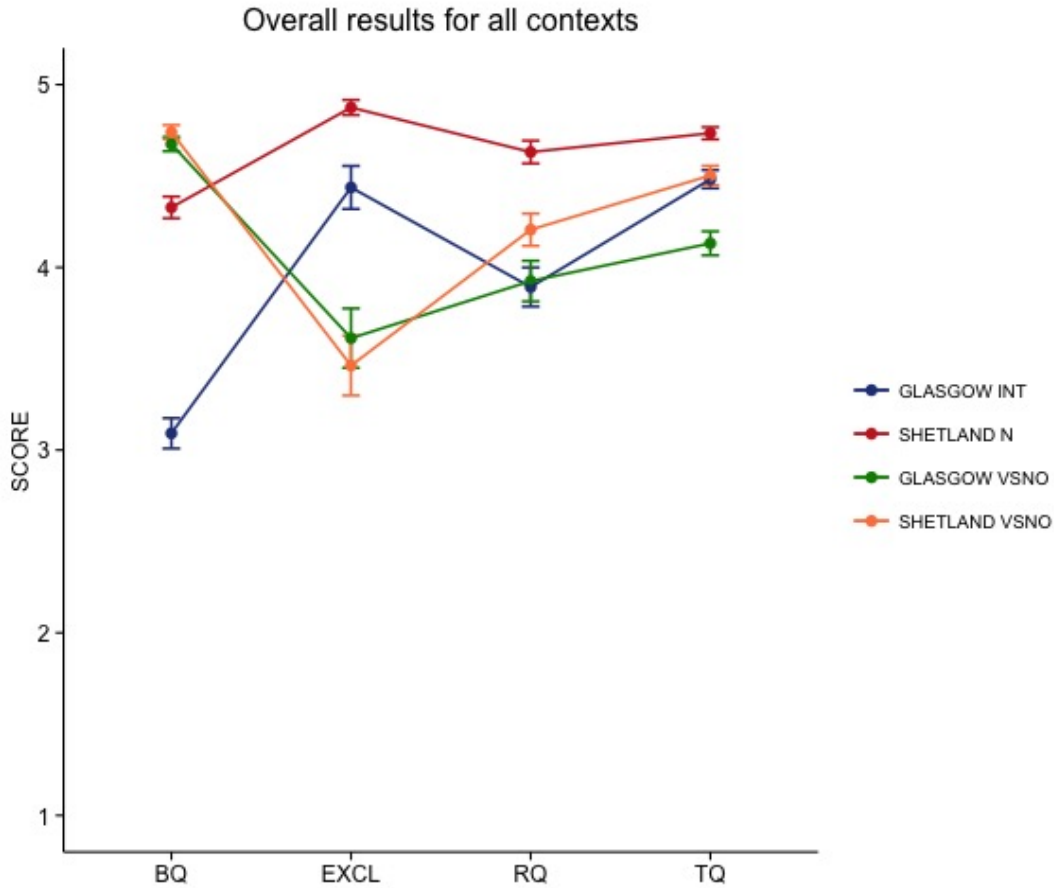


Figure 3.27: Mean ratings for local variants (*-int* in Glasgow and *-n* in Shetland) versus the standard construction (verb-subject-*no* in both varieties) in all four non-canonical question questions: matrix biased questions (BQ), exclamatives (EXCL), polar rhetorical questions (RQ) and tag questions with positive anchors (TQ).

### 3.3 Distribution in non-canonical questions

Before going into the detailed results, I will begin by giving an overall summary of the distribution of *-n* and *-int* across all four non-canonical constructions.

Recall that in the Scots dialect literature there are two relevant claims. Firstly, Robertson and Graham (1952) claim that *-n* is available in ‘interrogatives’ in Shetland dialect. This has already been shown to be false for truly negative questions and negative *wh*-questions – but is it acceptable in the four non-canonical construction types? Secondly, Thoms et al. (2013) claim that *-int* is only available in tag questions and exclamatives in Glasgow – however, recall that in the literature, tag questions are related to matrix biased questions and exclamatives are related to rhetorical questions, and there is thus a subsequent question about how *-int* is judged in these constructions too.

Looking at Figure 3.27, there are some interesting patterns which broadly correspond to the claims made in the literature. Firstly, note that *-n* (in red) appears to be in the ‘acceptable’ range in all four constructions in Shetland dialect, though slightly less so in matrix biased questions than in any of the other three constructions. Secondly, note that there are peaks for acceptability of *-int* (in blue) in exclamatives and tag questions; however, also note that polar rhetorical questions with *-int* seem to be on the cusp of acceptability when compared with the matrix biased questions with *-int*. Standard VSno constructions (in orange and green) interestingly seem to be acceptable in matrix biased questions, tag questions and polar rhetorical questions (at least in Shetland), but *not* in exclamatives. At this first glance, the results appear promising and corroborate the claims made in the literature so far. However, there is considerably more analysis that can be done within each location and each question type to establish the patterns of use and the patterns of change happening in each community – taking into account factors like age, evidential context (where relevant) and verb type. I will firstly discuss matrix biased questions, before turning to tag questions. Discussion on exclamatives and polar rhetorical questions will follow.

### 3.3.1 Matrix biased questions

Matrix biased question examples were split into two groups: those in which the participant was given a belief and then was presented with counterevidence which challenged that belief (a *negative evidential context*), and then those in which the participant was given a belief, but there was there nothing presented which would challenge this belief (a *neutral evidential context*). I will discuss the raw judgments for each type of context separately.

#### Negative evidential contexts

##### Shetland

Examples (134) and (135) show the type of examples with negative evidential contexts that participants judged.

(134) You ask me to help you change the oil in your car. I agree quite confidently, but when I actually get under the bonnet, it becomes clear I really don’t know what I’m doing. You say:

**Are you no** done this before? / **Is du no** done this before?

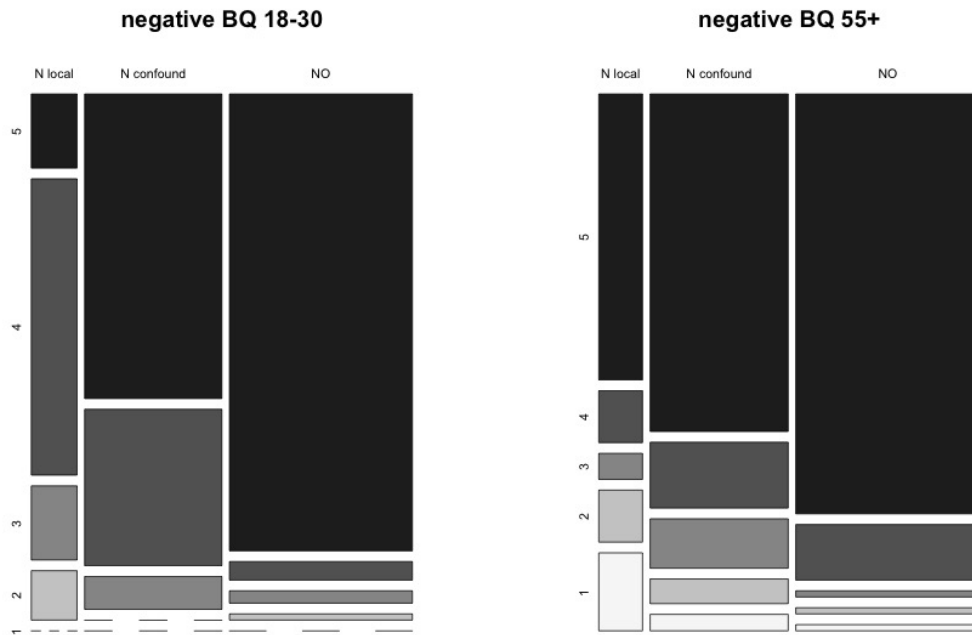


Figure 3.28: Proportions of judgments for *-n* (clear and potentially confounded) and VSno in biased questions in negative evidential contexts in Shetland, by age.

(135) The other week I told you I was going to go to this new restaurant down the road. Now, you are thinking about going. You ask me if it is any good, but I say I don't know. You say:

**Ir'n** [ɪ. rən] you been? / **Is'n** [ɪ. zən] du been?

As can be seen in Figure 3.28, VSno constructions were rated highly in both age groups, with 92.5% (N=74) of examples getting a 5 rating from the 18-30 group, and 85% (N=68) of examples getting a 5 rating from the 55+ group.

For *-n*, in the cases where it is clearly the local variant, just 15% (N=3) of examples were rated 5 by the 18-30 group, while 55% (N=11) were by the 55+ group. In the potentially confounded examples, 61.66% (N=37) were rated 5 by the 18-30 group and 68.33% (N=41) were by the 55+ group.

There seems, therefore, to be a discrepancy between the ratings of the clearly local form in the 18-30 group and the 55+ group, with greater acceptance in the 55+ group, where over 50% of examples scored a 5.

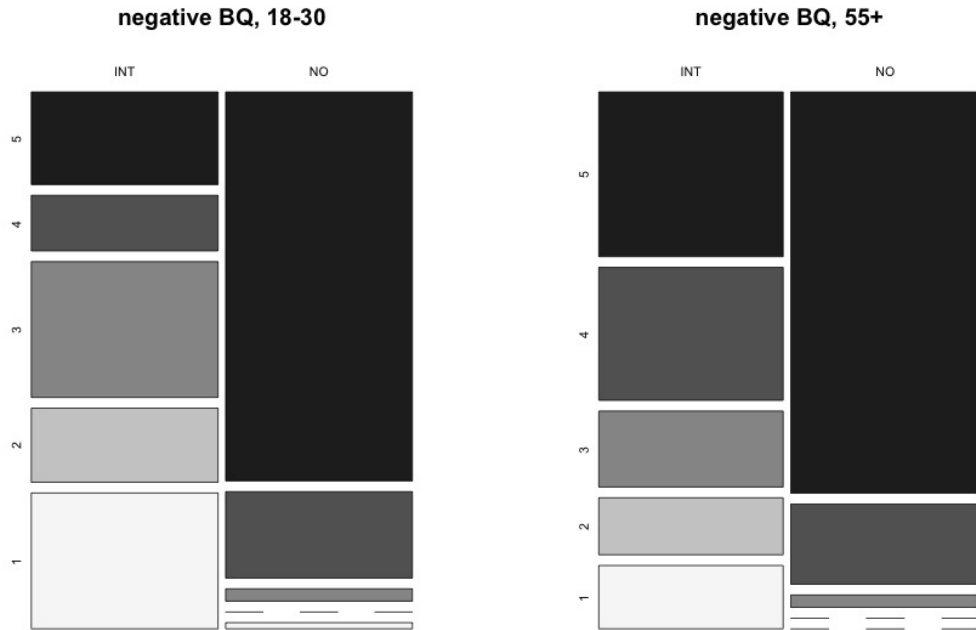


Figure 3.29: Proportions of judgments for *-int* and *VSno* in biased questions in negative evidential contexts in Glasgow, by age.

### Glasgow

Examples (136) and (137) show the type of examples with negative evidential contexts that participants judged.

(136) You ask me to help you change the oil in your car. I agree quite confidently, but when I actually get under the bonnet, it becomes clear I really don't know what I'm doing. You say:

**Have you no** done this before?

(137) The other week I told you I was going to go to this new restaurant down the road. Now, you are thinking about going. You ask me if it is any good, but I say I don't know. You say:

**Hint** [hmt] you been?

As can be seen in Figure 3.29, *VSno* constructions are rated highly by participants in both age groups, with 81.25% (N=65) 5 ratings in the 55+ group and 78.75% (N=63) 5 ratings in the 18-30 group. In the 18-30 group, 42.5% (N=34) of *-int* examples received

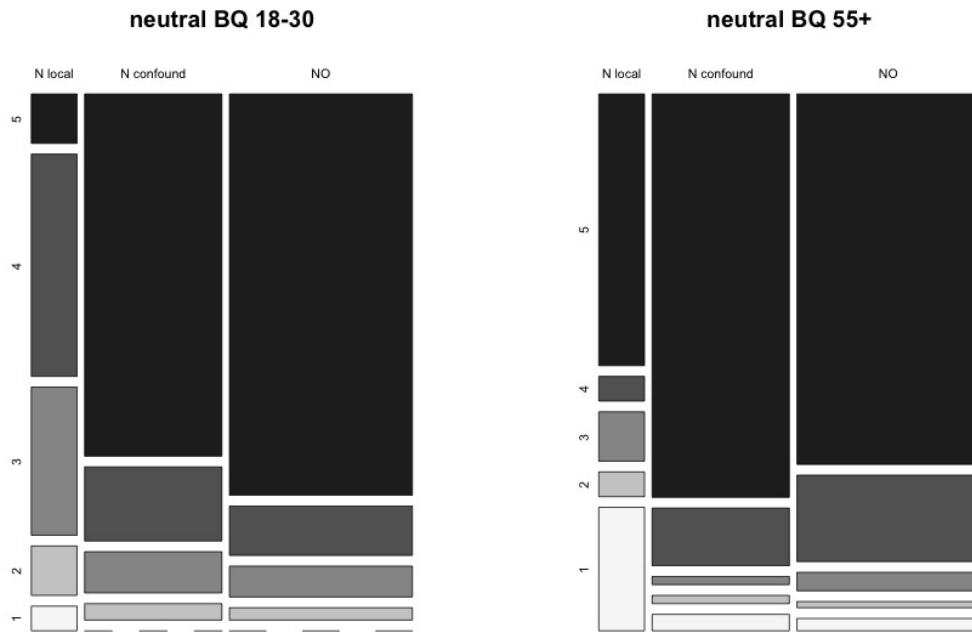


Figure 3.30: Proportions of judgments for *-n* (clear and potentially confounded) and VSno in biased questions in neutral evidential contexts in Shetland, by age.

a rating of 1 or 2. In the 55+ group, 24.4% (N=19) of *-int* examples received a 1 or 2 rating, with 33.3% (N=26) receiving a 5 rating.

### Neutral evidential contexts

#### Shetland

(138) I really like films with Angelina Jolie in them. A friend of ours is telling us about her most recent film they went to see the other day. You say to me:

**Wid you/du no** like that film?

(139) Our friend plays for a local hockey team. They are having a charity fundraiser, and I tell you that she said we have to come and that it's going to be absolutely amazing. You say:

**Wid'n** [wi. dən] she say that?

VSno constructions were rated highly in both age groups. 81.25% (N=65) of examples were rated 5 by the 18-30 group, while 75% (N=60) were by the 55+ group. In



the possibly confounded situation, 73.33% (N=44) of examples were rated 5 by the 18-30 group while 81.66% (N=49) of examples were rated 5 by the 55+ group.

There is some divergence in the ratings for the clearly local  $-n$  particle, however. The numbers are considerably smaller than in the other two groups (only 2 examples per participant), but 55% (N=11) of examples are rated 5 by the 55+ group, giving a median of 5. In comparison, only 10% (N=2) are rated 5 by the 18-30 group, with a median of 4 (45%, N=9).

The differences can be seen clearly in Figure 3.30, where the ‘N local’ column looks very different for the 18-30 group than the 55+ group. The results are fairly similar for the other two columns, and between age groups.

### Glasgow

(140) I really like films with Angelina Jolie in them. A friend of ours is telling us about her most recent film they went to see the other day. You say to me:

**Wid you no** like that film?

(141) Our friend plays for a local hockey team. They are having a charity fundraiser, and I tell you that she said we have to come and that it’s going to be absolutely amazing. You say:

**Wint** [wɪnt] she say that?

In neutral contexts, as can be seen in Figure 3.31, once again VSno was rated highly in both age groups – with 76.25% (N=61) 5 ratings in the 55+ group and 70% (N=56) 5 ratings in the 18-30 group. 26.9% (N=21) received a 1 or 2 rating in the 55+ group (median = 5 (27.5%, N=22)), with 52.5% (N=42) giving a 1 or 2 rating in the 18-30 group.

### 3.3.2 Matrix biased questions – overall

Running a CLMM with random intercepts for participant and example in Shetland (as seen in Figure 3.32) shows that there was an effect of construction type (whether VSno,  $-n$  in a clearly local context or  $-n$  in a potentially confounded context). There was also an interaction between the potentially confounded  $-n$  cases and the evidential context – however, there were no further effect or interactions. Means are thus plotted for construction type by evidential context, and given the clear differences in behaviour seen in the descriptive statistics, by age. This can be seen in Figure 3.33.

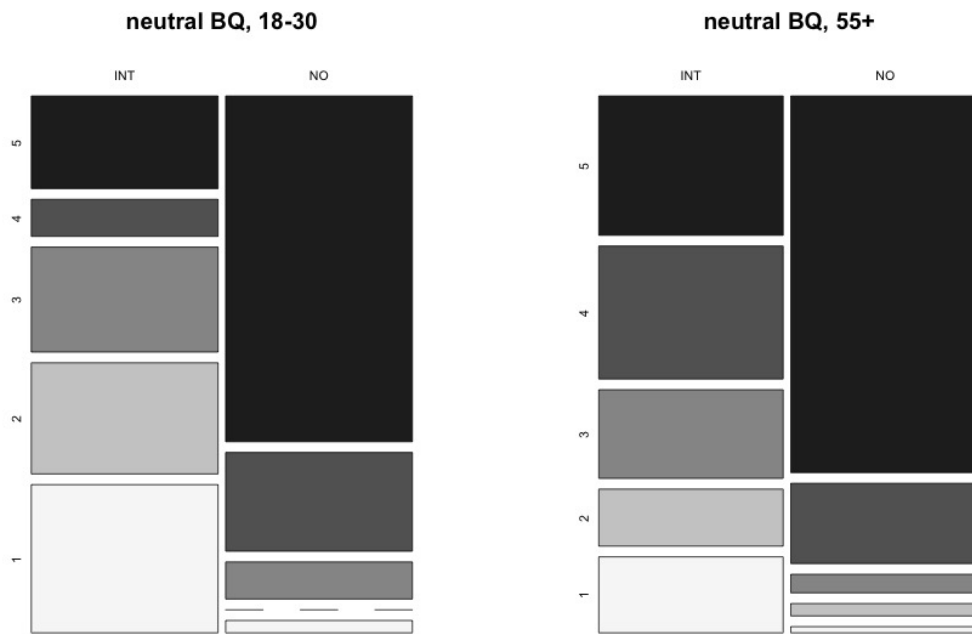


Figure 3.31: Proportions of judgments for *-int* and *VSno* in biased questions in neutral evidential contexts in Glasgow, by age.

Groups	Name	Variance	Std.Dev.
EXAMPLE	(Intercept)	0.4459	0.6678
PARTICIPANT	(Intercept)	1.2522	1.1190

Number of groups: EXAMPLE 32, PARTICIPANT 20

Coefficients:	Estimate	Std. Error	z value
particle.LOCAL	-2.5373	0.8161	-3.109
particle.OTHER	-1.4347	0.5996	-2.393
EVIDENCENEUT	-0.8156	0.5693	-1.433
AGEY	0.5357	0.7722	0.694
particle.LOCAL:EVIDENCENEUT	0.5460	1.1287	0.484
particle.OTHER:EVIDENCENEUT	1.8340	0.8474	2.164
particle.LOCAL:AGEY	-1.3881	0.8580	-1.618
particle.OTHER:AGEY	-0.7221	0.7087	-1.019
EVIDENCENEUT:AGEY	-0.4551	0.7091	-0.642
particle.LOCAL:EVIDENCENEUT:AGEY	0.2928	1.1419	0.256
particle.OTHER:EVIDENCENEUT:AGEY	-0.1907	0.9562	-0.199

	Pr(< z )
particle.LOCAL	0.00188 **
particle.OTHER	0.01673 *
EVIDENCENEUT	0.15194
AGEY	0.48787
particle.LOCAL:EVIDENCENEUT	0.62855
particle.OTHER:EVIDENCENEUT	0.03045 *
particle.LOCAL:AGEY	0.10569
particle.OTHER:AGEY	0.30824
EVIDENCENEUT:AGEY	0.52098
particle.LOCAL:EVIDENCENEUT:AGEY	0.79766
particle.OTHER:EVIDENCENEUT:AGEY	0.84196

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 Signif. codes: 0 '\*\*\*\*' 0.001 '\*\*\*' 0.01 '\*\*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:	Estimate	Std. Error	z value
112	-5.9573	0.6478	-9.196
213	-5.0881	0.6168	-8.249
314	-4.0702	0.5952	-6.838
415	-2.4699	0.5716	-4.321

Figure 3.32: Cumulative link mixed model results for matrix biased questions in Shetland. Note that there are effects of construction type: *VSno*, clearly local instances of *-n* and potentially confounded instances of *-n*, as well as an interaction between those potentially confounded instances and the evidential context they appear in. There were no further effects or interactions.

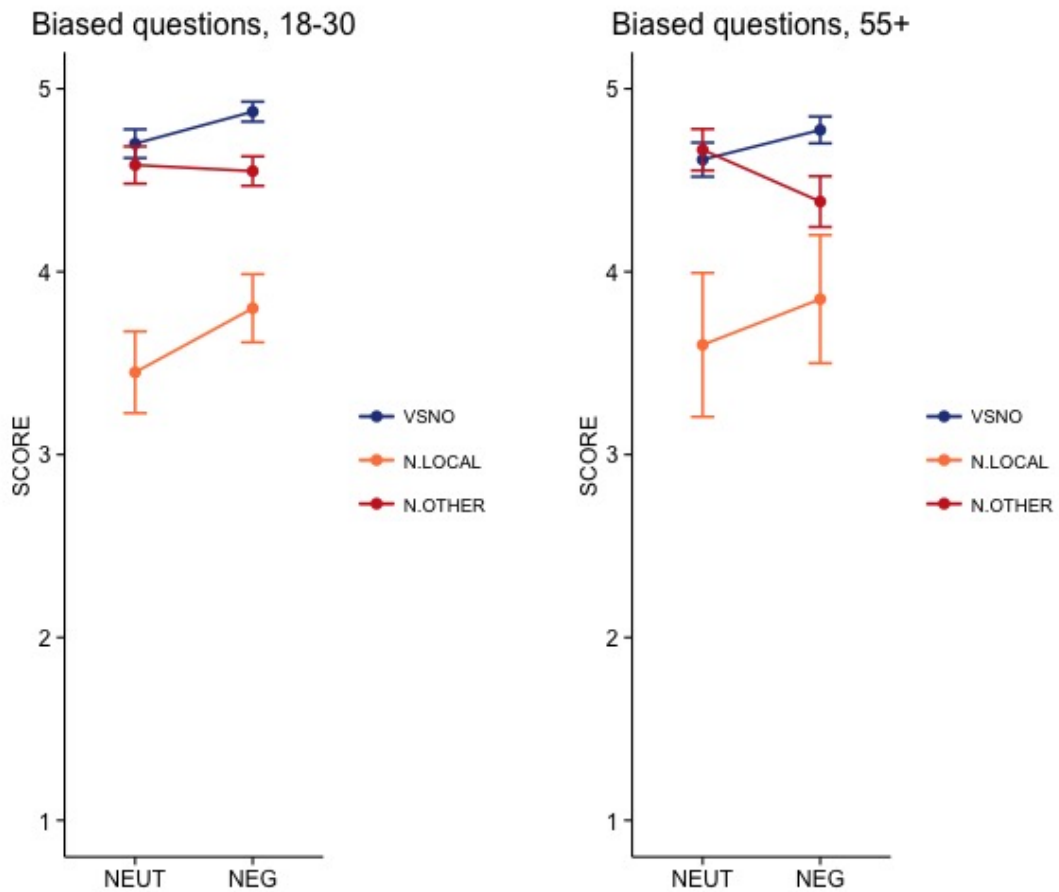


Figure 3.33: Mean ratings for standard VSno constructions and  $-n$  in matrix biased questions in Shetland, by age and evidential context. Verbs where the  $-n$  examples were clearly local are plotted in orange; verbs where  $-n$  could potentially be confounded with  $-n't$  are plotted in red.

Looking here at the clearly local verbs with  $-n$  ('N.local'), we see that the mean ratings for the examples in the two age groups are very similar. However, the information from the descriptive statistics indicates that these means were reached in very different ways. For older speakers, the mid-range mean comes from over 50% of examples being rated 5, and then a collection of 1-2 ratings bringing down the average. The examples that are rated highly vs those that are not do not correspond to individual participants, examples, age groups, areas: it appears to be an instance of random variation, as we might expect to see at the end of a change (Smith and Durham 2011). On the other hand, the 18-30 group's mean comes from primarily mid-range ratings, with very few ratings at either pole. Following the analysis of participants' rating systems given in the previous section, despite the fact that we see no statistical effects of age in the model, it seems that participants are behaving very differently when it comes to the clearly local examples of  $-n$ .

It is also worth looking at the potentially confounded  $-n$  examples. Here, there is again no interaction with age, but there is an interesting interaction with evidential context. As we will see in chapter 5, speakers generally prefer to produce biased questions in negative evidential contexts over neutral ones – and this is the pattern we also see in the Glasgow data, shown in Figure 3.36, where the graph trends towards higher ratings for all biased questions in the negative context over the neutral context, for both acceptable and unacceptable variants. However, in Shetland dialect's potentially confounded examples, there is a preference for the  $-n$  variant to be in neutral contexts rather than negative ones (though despite being a significant interaction in the model, this is not supported by a paired t-test:  $t(119) = -1.5274$ , n.s.). This is surprising, given the general tendency. The general tendency can also be seen for the VSno data in Shetland, so it is not the case that Shetland dialect speakers are behaving different with regard to general use of biased questions. Furthermore, this suggests that it is not the case that Shetland dialect speakers are judging  $-n$  like standard English  $-n't$ , as this would be expected to be more highly rated in negative contexts (see chapter 5).

This is interesting as it indicates similar behaviour to the pattern for  $-n't$  found in the north of Scotland (Tagliamonte and Smith 2002), where  $-n't$  was found in 'rhetorical questions' – given that rhetorical questions require a neutral-positive evidential context, we would expect that a particle which is permitted in rhetorical questions like  $-n't$  would be better in evidential contexts which more closely resembled those that permit rhetorical questions.

Due to the nature of the potential confound of  $-n$  with  $-n't$ , it is impossible to know if participants were judging the  $-n$  particle in these contexts, or whether they were judging a reduced  $-n't$ . It may also be worth noting as we saw in chapter 2 that  $-n$ -like particles were historically recorded in interrogatives in the north of mainland Scotland too. Either way, it appears that in these neutral evidential contexts, Shetland participants are behaving in general like other northern Scots speakers – either by retaining the  $-n$  particle, by adopting the present-day use of  $-n't$  found in the north of Scotland, or a mixture of both. It may be that the mixture of both allows this to continue more strongly in contexts where there is this confound, while in cases where there is not (e.g. *can'n* or *do'n*), loss happens more rapidly.

Participants comments (shown in Figure 3.34) can also help shed some light on the situation. For 18-30 participants, VSno constructions are explicitly preferred in both negative and neutral contexts, though there are also a small number of requests for  $-n$  in neutral contexts only (including one *can'n*). For older speakers, VSno is strongly preferred in negative contexts in participants' explicit comments, but interestingly in neutral contexts, there are very few comments explicitly requesting VSno. There are also a few requests for  $-n$  in the neutral context – very slightly more than for VSno. This suggests that there has been a surge in preferred use of VSno in neutral evidential contexts for younger speakers, and that  $-n$  in (at least neutral) biased question contexts is acceptable for older speakers<sup>33</sup>. This corroborates the analysis of the CLMM output.

Moving on to the Glasgow data, running a CLMM with random intercepts for participant and example in Glasgow (as seen in Figure 3.35) shows that there was a strong effect of construction type (VSno or  $-int$ ), but no further effects or interactions. This effect is supported by the results of a paired t-test:  $t(315) = 17.618$ ,  $p < .001$ . In order for easier visual comparison with the Shetland data in Figure 3.33, means are still plotted for type of construction by evidential context and age (Figure 3.36).

Looking at the two locations together, we can see that the standard VSno construction is acceptable in both locations. However, it is clear that there is some sort of variation in behaviour between the two groups: while the mean for  $-int$  in Glasgow is clearly mid-range, the mean for confounded  $-n$  in Shetland is much higher: in the acceptable range. For the the clearly local  $-n$  in Shetland, the mid-range ratings indicate very different behaviour between the two age groups, with clear variability in

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<sup>33</sup>This also perhaps suggests that because the 55+ group made fewer explicit comments regarding preferences in the neutral evidential contexts, there were fewer things they disagreed with in this context. This would suggest that they would also be happy with the  $-n + no$  constructions that participants also judged: see section 3.4.

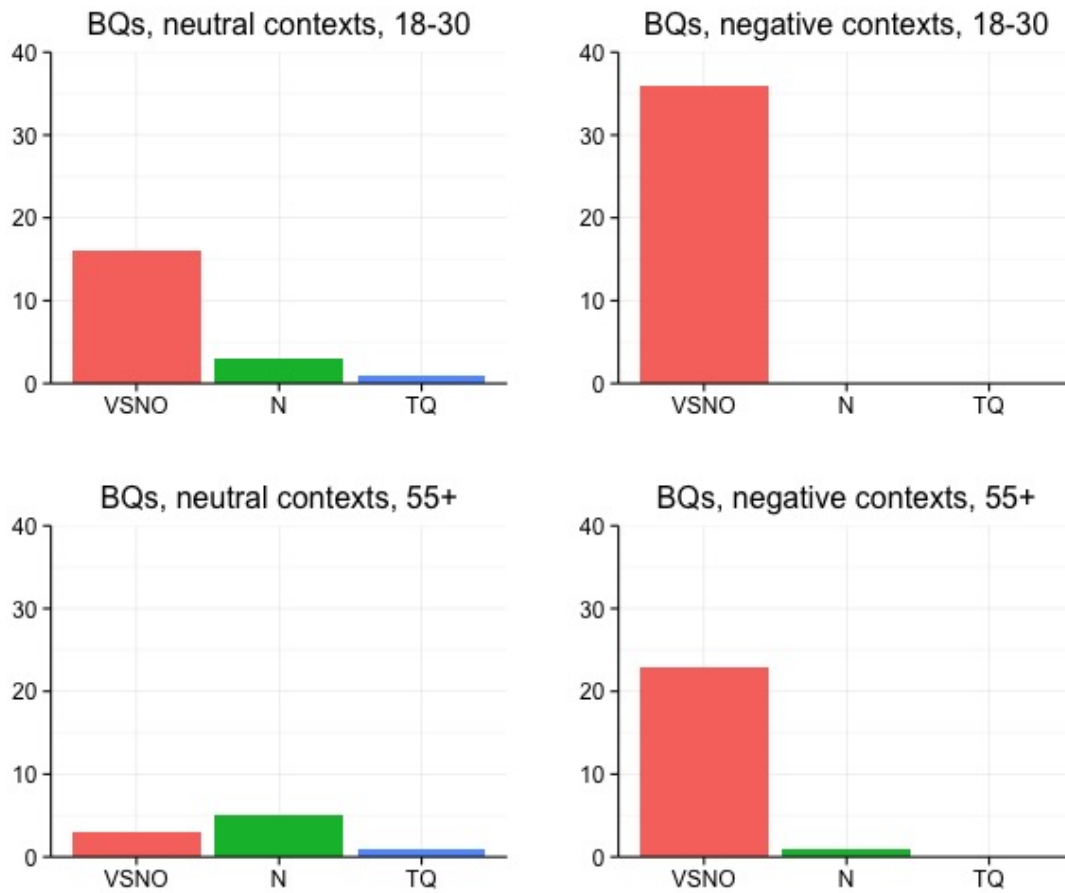


Figure 3.34: Explicit comments given by participants in Shetland regarding what they would *prefer* to use in a biased question by evidential context. Raw numbers of comments made are displayed on the y-axis. Only forms which were mentioned more than once were included. Note that as well as in reference to either VSno or *-n* examples, these explicit comments also came from examples which had both *-n* and *no*.

```

Random effects:
Groups      Name      Variance Std.Dev.
EXAMPLE    (Intercept) 0.3158  0.5619
PARTICIPANT (Intercept) 0.9481  0.9737
Number of groups: EXAMPLE 32, PARTICIPANT 20

Coefficients:
                Estimate Std. Error z value Pr(>|z|)
intINT          -2.574976   0.461057  -5.585 2.34e-08 ***
EVIDENCENEG     0.446720   0.501354   0.891  0.373
AGEY            -0.435123   0.581420  -0.748  0.454
intINT:AGEY     -0.790615   0.484551  -1.632  0.103
intINT:EVIDENCENEG -0.261813   0.647178  -0.405  0.686
EVIDENCENEG:AGEY  0.122758   0.564477   0.217  0.828
intINT:EVIDENCENEG:AGEY -0.007796   0.699587  -0.011  0.991
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
      Estimate Std. Error z value
112  -4.8259   0.5114  -9.436
213  -3.9228   0.4975  -7.885
314  -2.7696   0.4811  -5.757
415  -1.4600   0.4673  -3.125
(4 observations deleted due to missingness)

```

Figure 3.35: Cumulative link mixed model results for matrix biased questions in Glasgow. Note that there is a strong effect of construction type (whether VSno or *-int*). There were no further effects or interactions.

acceptability for speakers 55+, but perceptual hyperdialectal ratings from the 18-30 group.

In Glasgow, the mean ratings for *-int* are also mid-range. For younger speakers, there is a clear low median (as seen above for both neutral and negative evidential contexts); however, this is not the case for older speakers. There are a number of possible explanations for this: it may be that older speakers are generally uncertain of younger speakers' behaviour, as was described in section 2.5. In other cases, it may be that there was a confound between the example and a reduced *-n't*. It may also be that *-n't* was available in biased questions for older speakers, but has undergone a reduction and reanalysis to *-int* for younger speakers, and there is some residual acceptability.

Participants comments (as shown in Figure 3.37) may again shed some further light on the question: note that no participant in either age group explicitly requests *-int* in a matrix biased question. On the other hand, there are a number of preferences for VSno constructions, and also some for *-n't*. There is notable difference with the Shetland older speakers' comments here (seen in Figure 3.34), where VSno was not often offered as an alternative in neutral contexts, ever so slightly less than *-n*. In Glasgow, *-int* is never offered as an alternative, and speakers of all ages express explicit preferences for VSno in

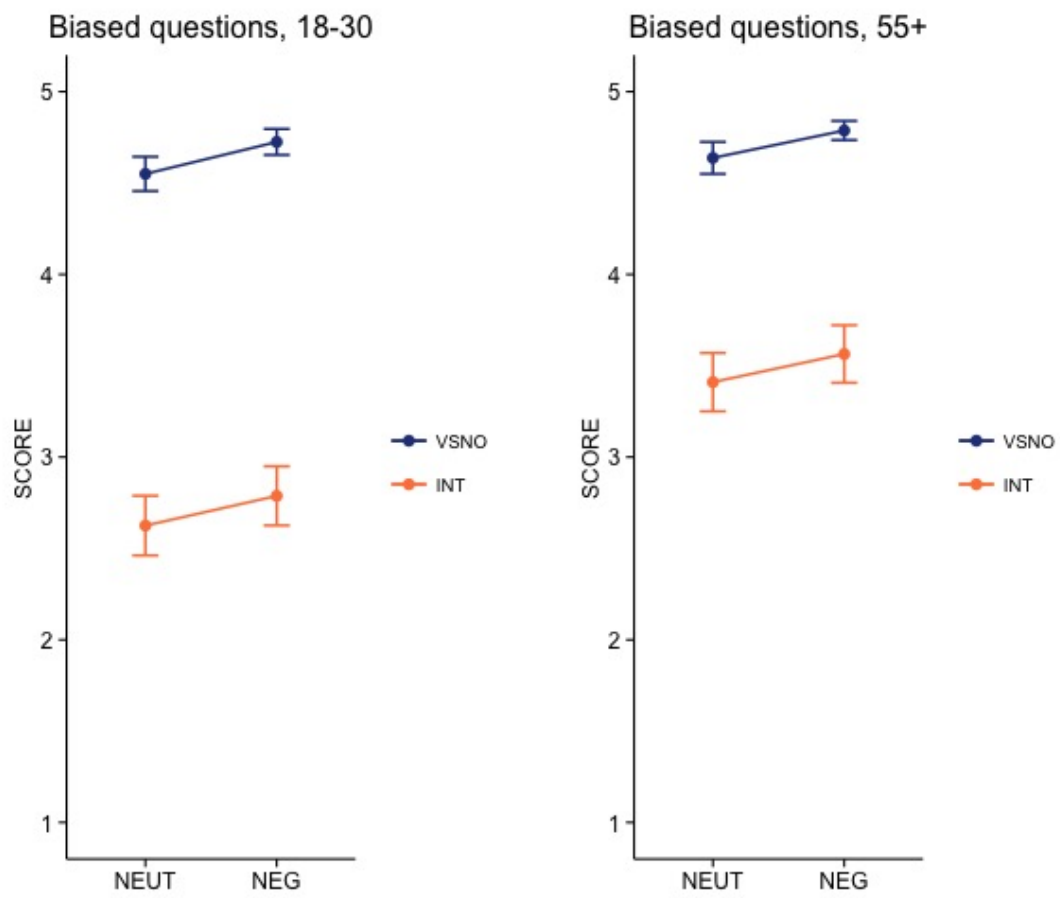


Figure 3.36: Mean ratings for standard construction VSno and *-int* in matrix biased questions in Glasgow, by age and evidential context.



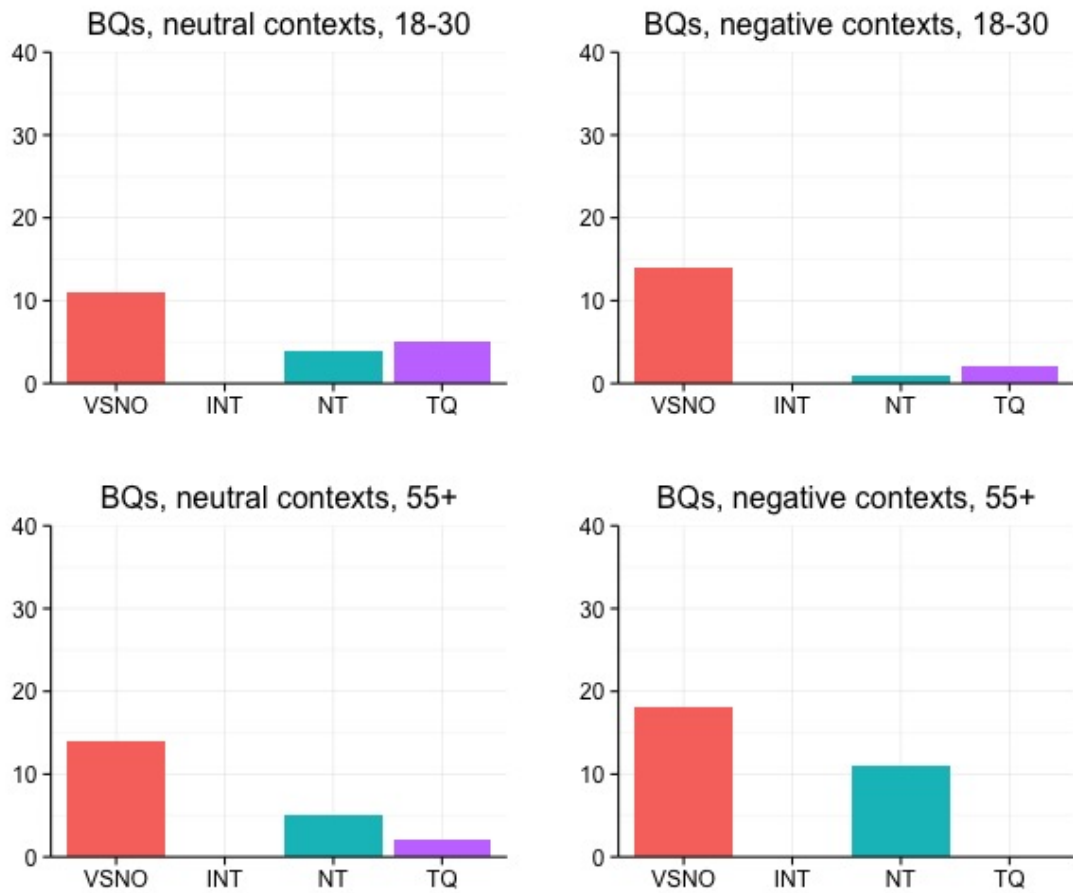


Figure 3.37: Explicit comments given by participants in Glasgow regarding what they would *prefer* to use in a biased question by evidential context. Raw numbers of comments made are displayed on the y-axis. Only forms which were mentioned more than once were included. Note that as well as in reference to either VSno or *-int* examples, these explicit comments also came from examples which had both *-int* and *no*.

all biased question contexts.

Whatever the explanation, there is nevertheless a clear and statistically significant difference in acceptability between VSno and *-int* constructions for both age groups in Glasgow, with a mean rating well below the 4-5 range. It seems as though *-int* is not acceptable in matrix biased questions: we will be able to see clear differences between the acceptability of *-int* in e.g. tag questions as opposed to these matrix biased questions in the next section.

### 3.3.3 Tag questions on positive anchors

Like the biased questions discussed above, tag questions on positive anchors were also presented in two evidential contexts – those where the participant was given some counterevidence to challenge the belief that had been established for them (*a negative evidential context*) and those where there was no counterevidence to challenge their belief (*a neutral evidential context*). Participants in both locations judged the standard verb-subject-*no* tag and the local variant, whether that was *-n* in Shetland or *-int* in Glasgow.

Tag questions on negative anchors will be discussed in section 3.3.11.

#### Neutral evidential contexts

##### Shetland

Examples (142) and (143) exemplify the constructions that participants in Shetland judged for tag questions on positive anchors in neutral evidential contexts.

(142) A while ago, I told you I would be able to pick up your cousin from the airport.

Now, you tell me that she is arriving tomorrow and you say:

You can pick her up, **can you no**?

(143) You are pretty sure that you have seen that I have a driving license. We agree to help one of our friends move house, and we're going to rent a van to do it. You say to me:

You can drive, **can'n** [kɪ.nən] you?

As can be seen in Figure 3.38, speakers of all ages seem to accept tags with both the *-n* and VSno forms. This is particularly true of the 55+ group, who give 90% (N=18) of the clearly local examples a rating of 5, as well as 86.67% (N=52) of the potentially

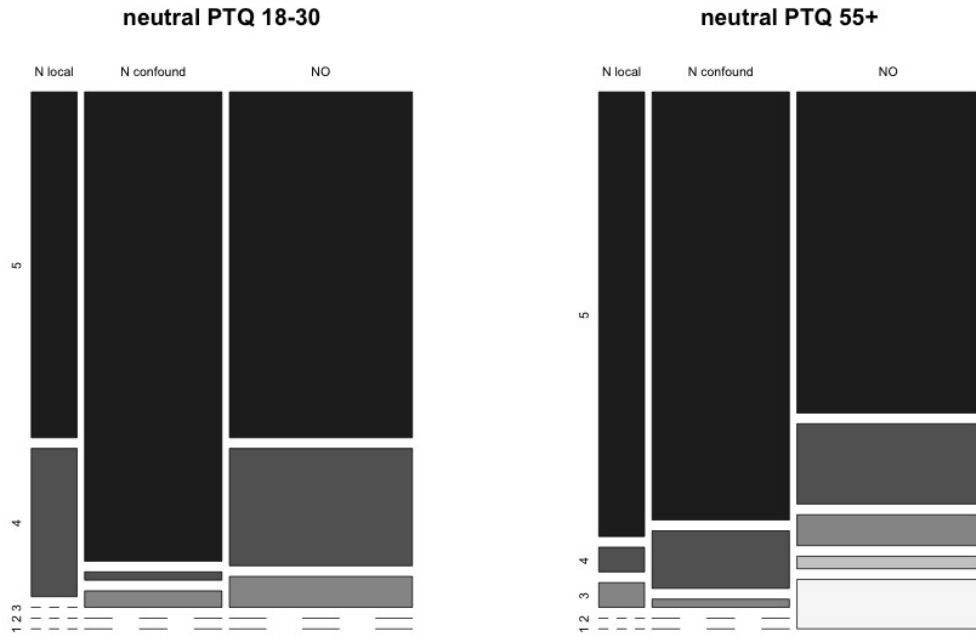


Figure 3.38: Proportions of judgments for  $-n$  (clearly local and potentially conflated) and VSno as tag questions on positive anchors in neutral evidential contexts, in Shetland, by age.

conflated examples. VSno performs well with the older speakers too, with 65% (N=52) 5 ratings – however, less well than the  $-n$  examples.

Young speakers rate the potentially conflated examples very highly (95% (N=57) 5 ratings) - but they also rate the clearly local variant highly, with 70% (N=14) 5 ratings and no 1, 2 or 3 ratings at all. This is the same percentage of 5 ratings as for the VSno construction (70% (N=56)).

We can look at the explicit comments regarding preferences that speakers made to further explore their preferences. As can be seen in Figure 3.39, 55+ participants consistently requested  $-n$ , and never VSno in the neutral contexts. On the other hand, while the 18-30 group did request  $-n$ , they also frequently stated an explicit preference for VSno. It is worth noting that of the 30 requests for  $-n$  in the younger group, nine were for the clearly local example *can'n*, where there is no question that it is  $-n$  that is preferred.

It seems, therefore, as though older speakers have a preference for  $-n$  in neutral evidential contexts, but also accept VSno. Younger speakers accept both constructions, with perhaps a slight preference for  $-n$ , but this is less clear than it is for older speakers.

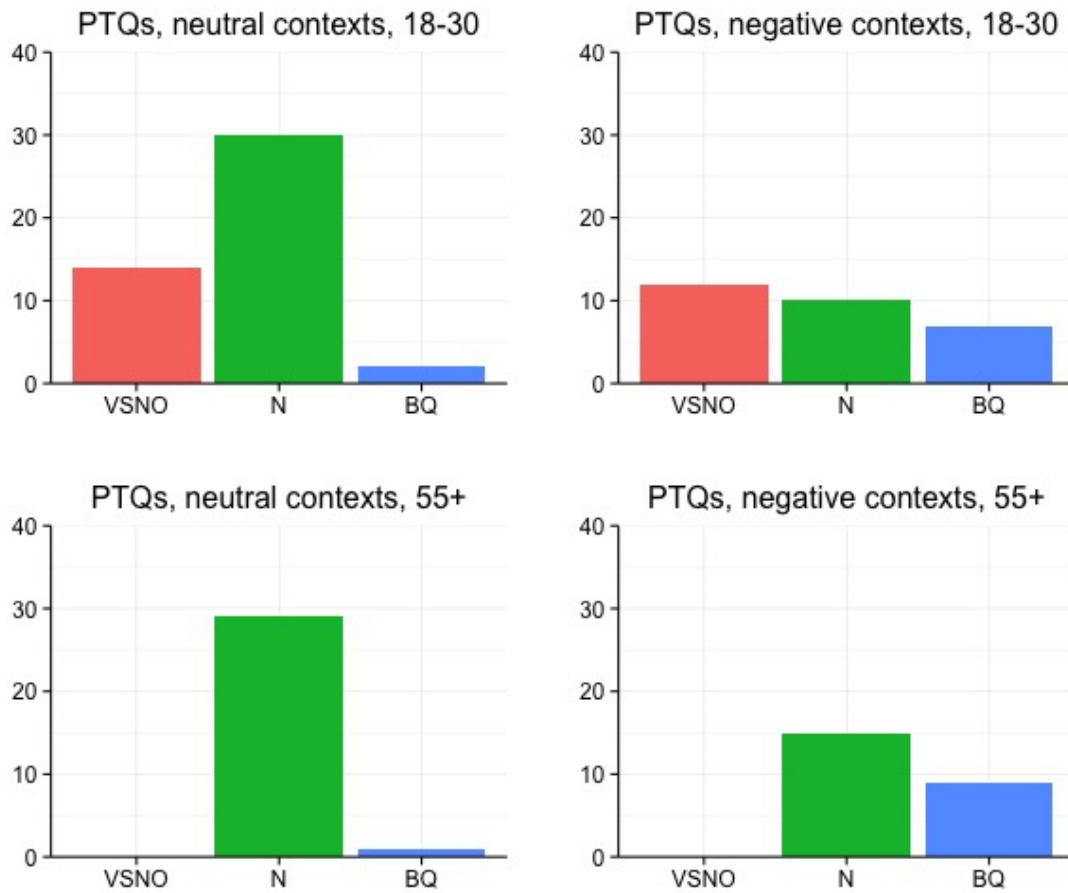


Figure 3.39: Explicit comments given by participants in Shetland regarding what they would *prefer* to use as a tag question on a positive anchor, by evidential context. Raw numbers of comments made are displayed on the y-axis. Only forms which were mentioned more than once were included. Note that as well as in reference to either VSno or  $-n$  examples, these explicit comments also came from examples which had both  $-n$  and *no*.

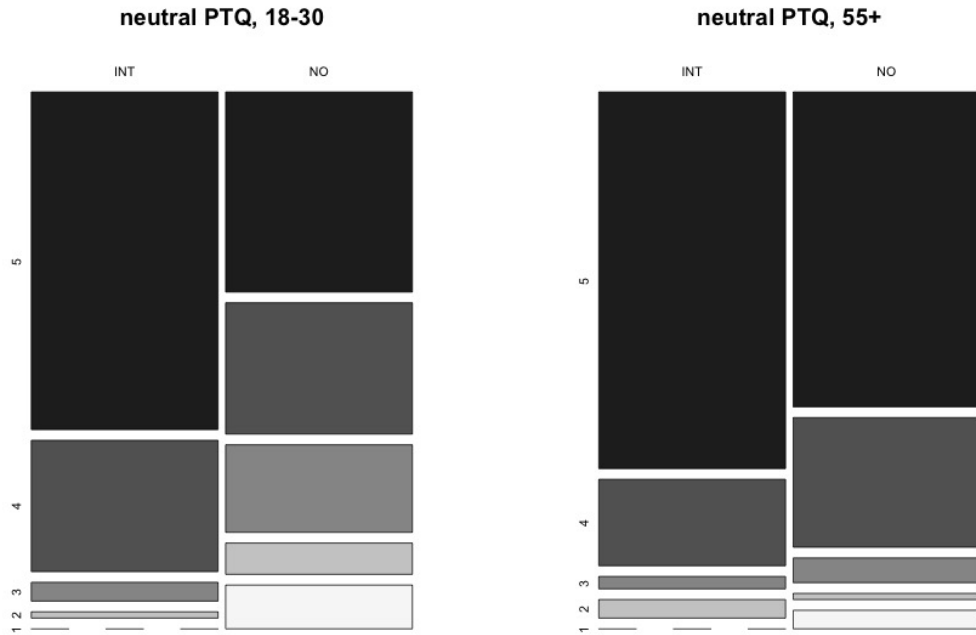


Figure 3.40: Proportions of judgments for *-int* and VSno as tag questions on positive anchors in neutral evidential contexts in Glasgow.

## Glasgow

Examples (144) and (145) exemplify the constructions that participants in Glasgow judged for tag questions on positive anchors in neutral evidential contexts.

(144) A while ago, I told you I would be able to pick up your cousin from the airport.

Now, you tell me that she is arriving tomorrow and you say:

You can pick her up, **can you no**?

(145) You are pretty sure that you have seen that I have a driving license. We agree to help one of our friends move house, and we're going to rent a van to do it. You say to me:

You can drive, **kint** [kmt] you?

In the 55+ group, both VSno and *-int* tags are rated fairly highly in neutral contexts. 76.25% (N=61) of *-int* tags received a 5 rating, while 63.75% (N=51) of VSno tags did. In the 18-30 group, only 40% (N=32) of VSno tags received a 5 rating, while 68.4% (N=54) of *-int* tags did.

It seems, therefore, that *-int* tags are acceptable in neutral contexts for both age groups, with no 1 ratings at all. VSno tags appear more acceptable to older speakers, with a bit more uncertainty for the younger speakers. This is corroborated by younger speakers' explicit preferences as shown in Figure 3.41 – in the neutral context, 18-30 speakers clearly prefer to request *-int*, with no explicit requests at all for VSno in neutral contexts. Compare this with the explicit preferences stated by older speakers in Figure 3.41 – though *-int* does get more comments than any other, there is still a showing for VSno too.

As expected, then, in neutral evidential contexts Glaswegian participants seem to be behaving similarly to the Shetland participants – with the age groups reversed. Younger speakers have a clear preference for *-int*, but appear to also accept VSno to some extent. Older speakers seem to accept both to some extent, with a slight preference for *-int*.

## Negative evidential contexts

### Shetland

Examples (146) and (147) exemplify the constructions that participants in Shetland judged for tag questions on positive anchors in negative evidential contexts.

(146) We have organised a retirement party for someone at work. I was meant to buy a gift, but at 6pm on the day of the party when you ask me where the present is, I say “what present?”. You say:

You bought the present, **did you no?**

(147) Last week on Facebook you saw a post about me going to see the latest James Bond film. However, when you ask me about a character from the film, I say “. . . I don't know?”. You say:

You saw the film last week, **did'n** [di.dən] you?

For participants in the 18-30 group, VSno tags in this context received 5 ratings in 76.25% (N=61) of examples, while 68.75% (N=55) did in the 55+ group. The potentially confounded tags were rated highly in both age groups, with 85% (N=51) 5 ratings from the 18-30 group and 78.33% (N=47) 5 ratings from the 55+ group.

The most interesting results, however, are perhaps from the clearly local variant, where 60% (N=12) of examples are rated 5 by the 55+ group, but only 25% (N=5) are by the 18-30 group. Recall in section 3.3.3, as seen in Figure 3.38, the 18-30 group seemed to accept *-n* quite happily in neutral evidential contexts, but they seem less sure of clear examples of *-n* as a tag in negative evidential contexts.

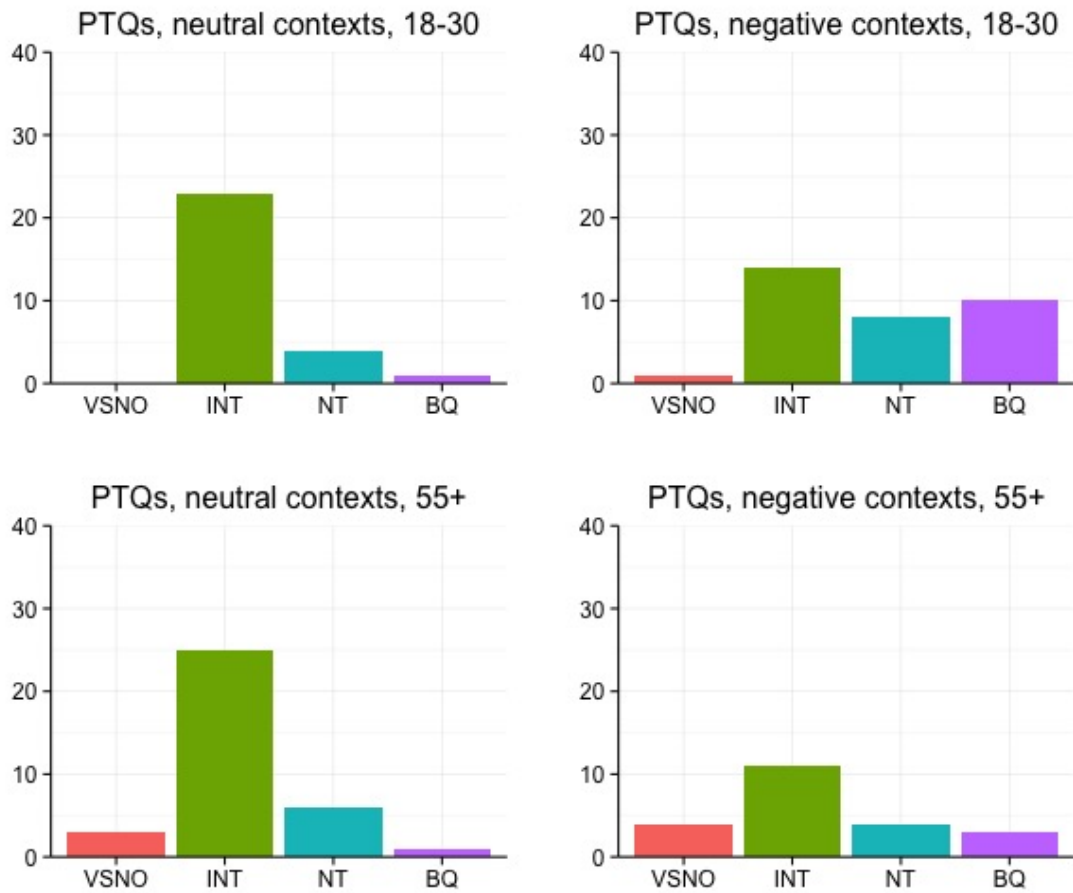


Figure 3.41: Explicit comments given by participants in Glasgow regarding what they would *prefer* to use as a tag question on a positive anchor, by evidential context. Raw numbers of comments made are displayed on the y-axis. Only forms which were mentioned more than once were included. Note that as well as in reference to either VSno or *-int* examples, these explicit comments also came from examples which had both *-int* and *no*.

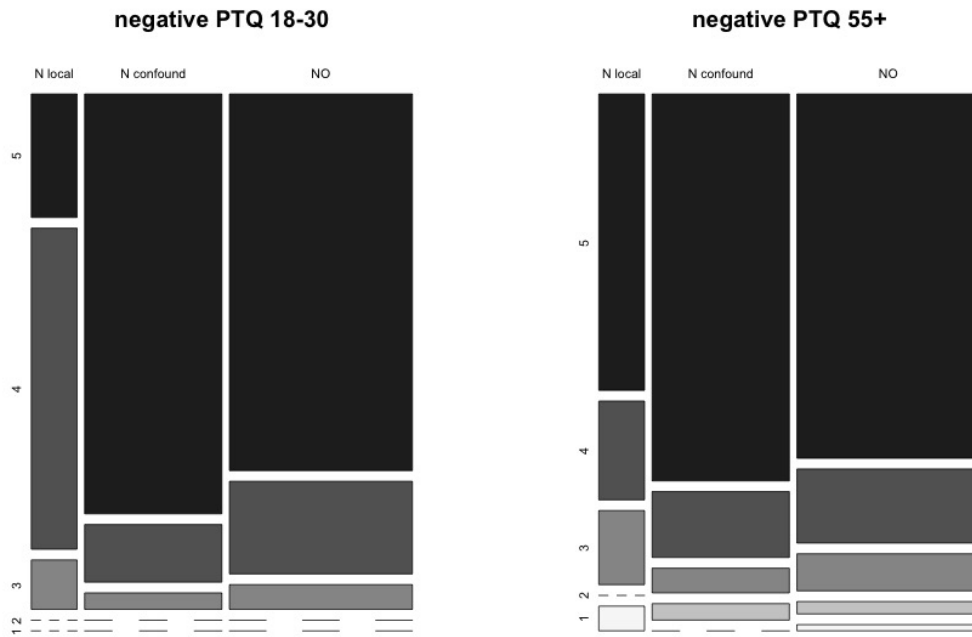


Figure 3.42: Proportions of judgments for  $-n$  (clearly local and potentially confounded) and VSno as tag questions on positive anchors in negative evidential contexts, in Shetland, by age.

Looking at participants' comments, this is highlighted further – 18-30 participants stated a preference for VSno tags more often than  $-n$  tags in negative evidential contexts (Figure 3.39), while 55+ participants did not request VSno tags at all in negative contexts.

It seems, therefore, like  $-n$  may be the preferred variant for older speakers in negative evidential contexts, but with definite acceptability of VSno as well. For younger speakers, there is less certainty about the acceptability of  $-n$  when it is clearly the local variant, but clear acceptability of VSno.

### Glasgow

Examples (148) and (149) exemplify the constructions that participants in Glasgow judged for tag questions on positive anchors in negative evidential contexts.

(148) We have organised a retirement party for someone at work. I was meant to buy a gift, but at 6pm on the day of the party when you ask me where the present is, I say “what present?”. You say:



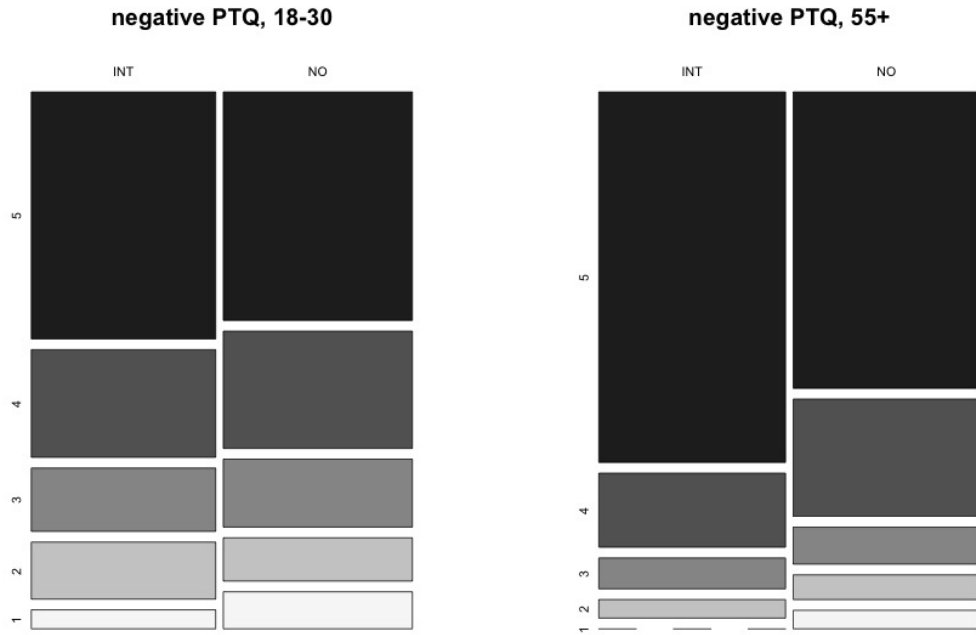


Figure 3.43: Proportions of judgments for *-int* and VSno as tag questions on positive anchors in negative evidential contexts, in Glasgow, by age.

You bought the present, **did you no**?

(149) Last week on Facebook you saw a post about me going to see the latest James Bond film. However, when you ask me about a character from the film, I say "... I don't know?". You say:

You saw the film last week, **dint** [dmt] you?

In negative evidential contexts, the 55+ group act very similarly to the neutral context, with 75% (N=60) 5 ratings for *-int* tags and 60% (N=48) for VSno tags. In the 18-30 group, there is a reduction in 5 ratings for the *-int* tags (50%, N=39), and a slight increase in 5 ratings for the VSno tags (46.25%, N=37).

Speakers' comments (Figure 3.41) overall follow similar patterns to the neutral context, too, with more explicit preferences for *-int* in both age groups, although to a lesser extent than in the neutral context. It is also notable that younger speakers in particular requested matrix biased questions, more than VSno tags.

It seems, therefore, that *-int* tags are acceptable in negative evidential contexts to some extent for the 18-30 group, though perhaps less than in neutral evidential contexts.

```

Random effects:
  Groups      Name      Variance Std.Dev.
EXAMPLE.NO (Intercept) 0.2506  0.5006
PARTICIPANT (Intercept) 1.5370  1.2398
Number of groups: EXAMPLE.NO 32, PARTICIPANT 20

Coefficients:
              Estimate Std. Error z value Pr(>|z|)
particleN.LOCAL      2.20569    0.94100  2.344 0.019079 *
particleN.OTHER      1.98799    0.57945  3.431 0.000602 ***
EVIDENCENEG          0.33142    0.45160  0.734 0.463025
AGEY                  0.55469    0.67412  0.823 0.410597
particleN.LOCAL:EVIDENCENEG -2.56676    1.17075 -2.192 0.028350 *
particleN.OTHER:EVIDENCENEG -1.18870    0.77265 -1.538 0.123935
particleN.LOCAL:AGEY   -2.18430    1.03433 -2.112 0.034704 *
particleN.OTHER:AGEY   0.26153    0.83595  0.313 0.754394
EVIDENCENEG:AGEY      0.02934    0.53461  0.055 0.956232
particleN.LOCAL:EVIDENCENEG:AGEY 0.58888    1.27887  0.460 0.645180
particleN.OTHER:EVIDENCENEG:AGEY -0.44699    1.05563 -0.423 0.671978
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
      Estimate Std. Error z value
112  -4.0401    0.5792 -6.975
213  -3.5573    0.5557 -6.401
314  -2.4379    0.5274 -4.622
415  -0.6379    0.5104 -1.250

```

Figure 3.44: Cumulative link mixed model results for tag questions on positive anchors in Shetland. There are main effects of construction type (whether  $-n$  in clearly local contexts,  $-n$  in potentially confounded contexts, or VSno), and interactions between the clearly local  $-n$  form and the evidential context, and the clearly local  $-n$  form and the age of the participants. There were no further effects or interactions.

VSno tags are not strongly preferred, and looking at the comments, it may be because speakers prefer matrix biased questions instead. Both  $-int$  and VSno seem to be acceptable for the 55+ group in negative evidential contexts.

### 3.3.4 Tag questions on positive anchors – overall

Running a CLMM with fixed effects of construction type ( $-n$  in both confounded and clearly local contexts, as well as VSno), evidential context and age, as well as random intercepts for participant and example in Shetland (as seen in Figure 3.44) shows that there was an effect of construction type (whether VSno, or  $-n$ , either clearly local or potentially confounded with standard  $-n't$ ). There were also interactions between the clearly local  $-n$  variant and evidence, and the clearly local  $-n$  variant and age. There were no further effects or interactions. Means are plotted for type of construction by evidential context and age, which can be seen in Figure 3.45.

Unlike with biased questions, we saw a more similar pattern in the raw judgment data between older speakers and younger speakers: however, there is a difference in their

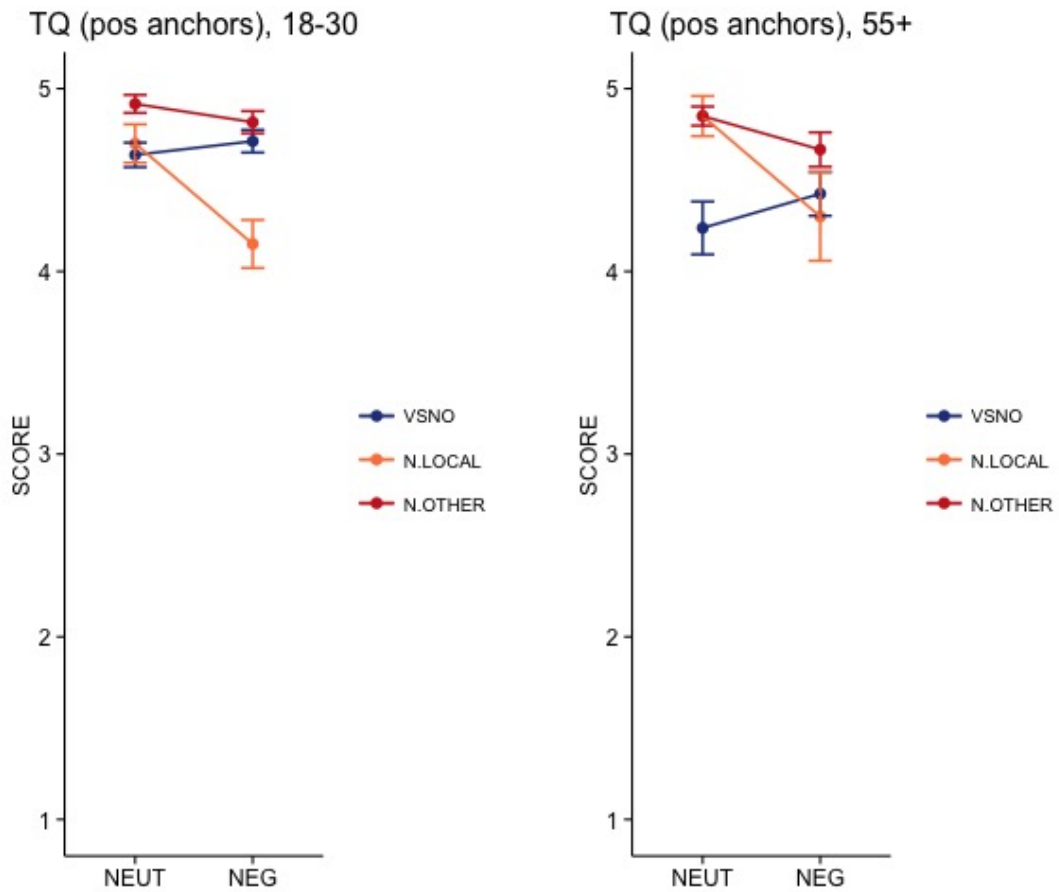


Figure 3.45: Mean ratings for standard construction VSno and  $-n$  in tag questions on positive anchors in Shetland, by age and evidential context. Clearly local examples (e.g. *can'n*) are in orange, while examples which are potentially confounded with the standard (e.g. *did'n*) are in red. Standard VSno means are plotted in blue.

judgments of clearly local variants. For older speakers, it appears that clearly local variants are as acceptable as the potentially confounded variants, while that is not quite the case for younger speakers. However, this interaction between the local *-n* variants and the age groups is not supported by a t-test:  $t(68.724) = 0.89776$ , n.s. – and clearly, there are high levels of acceptability of the variant for speakers of all ages, with both a median of 5 and a mean in the 4-5 range for both age groups. However, for both age groups, in the clearly local variant of *-n* there is a preference for neutral evidential contexts over negative evidential contexts. This can be seen from the graph in Figure 3.45, and the interaction is supported by a paired t-test:  $t(39) = 3.8462$ ,  $p = .0004$ .

Moving on to the Glasgow data, running a CLMM with fixed effects of construction type, evidential context and age, as well as random intercepts for participant and example in Glasgow (as seen in Figure 3.46) shows that there was an interaction between construction type, evidence and age, but no further effects or interactions. Looking at the raw data in Figure 3.40 and Figure 3.43, it appears that younger speakers preferred *-int* to VSno in neutral evidential contexts. This is supported by a paired t-test (Bonferroni corrected, significance level = .0125):  $t(77) = -4.7753$   $p < .001$ . There are no further significant comparisons in either evidential context for either age group. Means are plotted for type of construction by evidential context and age, which can be seen in Figure 3.47.

The difference in acceptability visible in the 18-30 group but not the 55+ group may once again be due to a number of factors: primarily, *-int* as a recent innovation, and/or older speakers' tendency to be more permissive in their ratings.

We will consider tags on negative anchors in section 3.3.11 below.

### 3.3.5 Polar rhetorical questions

In both Shetland and Glasgow, participants judged rhetorical questions with verb-subject-*no* as the standard. As rhetorical questions are not discussed in the literature for either of these locations, the standard VSno construction for interrogative syntax was assumed. However, it must be noted that Tagliamonte and Smith (2002) find *-n't* is used for rhetorical questions in three Scots varieties, and so this must be kept in mind as a possible standard also.

Participants in each location also judged examples of their local particle: so *-n* in Shetland and *-int* in Glasgow.

```

Random effects:
  Groups      Name      Variance Std.Dev.
EXAMPLE      (Intercept) 0.2465  0.4965
PARTICIPANT  (Intercept) 1.4629  1.2095
Number of groups: EXAMPLE 32, PARTICIPANT 20

Coefficients:
              Estimate Std. Error z value Pr(>|z|)
intINT          0.78680   0.44473   1.769   0.0769 .
EVIDENCENEUT    0.21038   0.42679   0.493   0.6221
AGEY            -0.85679   0.63962  -1.340   0.1804
intINT:EVIDENCENEUT -0.04212   0.63231  -0.067   0.9469
intINT:AGEY     -0.65932   0.48781  -1.352   0.1765
EVIDENCENEUT:AGEY -0.40397   0.46691  -0.865   0.3869
intINT:EVIDENCENEUT:AGEY 1.55407   0.70492   2.205   0.0275 *
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
      Estimate Std. Error z value
112  -4.2218    0.5443  -7.756
213  -3.1487    0.5149  -6.115
314  -2.2049    0.5021  -4.391
415  -0.6427    0.4924  -1.305
(4 observations deleted due to missingness)

```

Figure 3.46: Cumulative link mixed model results for tag questions on positive anchors in Glasgow. There is an interaction between the construction type (whether *-int* or VSno), evidential context and age. There were no further effects or interactions.

## Shetland

Examples (150) and (151) show the types of polar rhetorical question construction that participants in Shetland judged.

(150) I am just back from my holidays. I had a great time, and I'm very tanned. Later that day, I say to you "I can't wait to get away again". You say:

**Are you no** just been on holiday?! It's my turn.

(151) I have entered some photos in a photography competition. I tell you I could win in one of the rounds, but I have lost all the rounds so far and I am looking pretty sad about it, so you say:

**Can'n** [kɪ. nəŋ] you still win the last one?!

Ratings for VSno constructions were generally fairly high – 63.75% (N=51) 5 ratings in the 55+ group and 48.75% (N=39) in the 18-30 group. *-n* constructions where the example could be confounded with the standard scored very highly, with 86.66% (N=52) 5 ratings from the 18-30 group, and 85% (N=51) 5 ratings from the 55+ group, and no 1 or 2 ratings from either group.

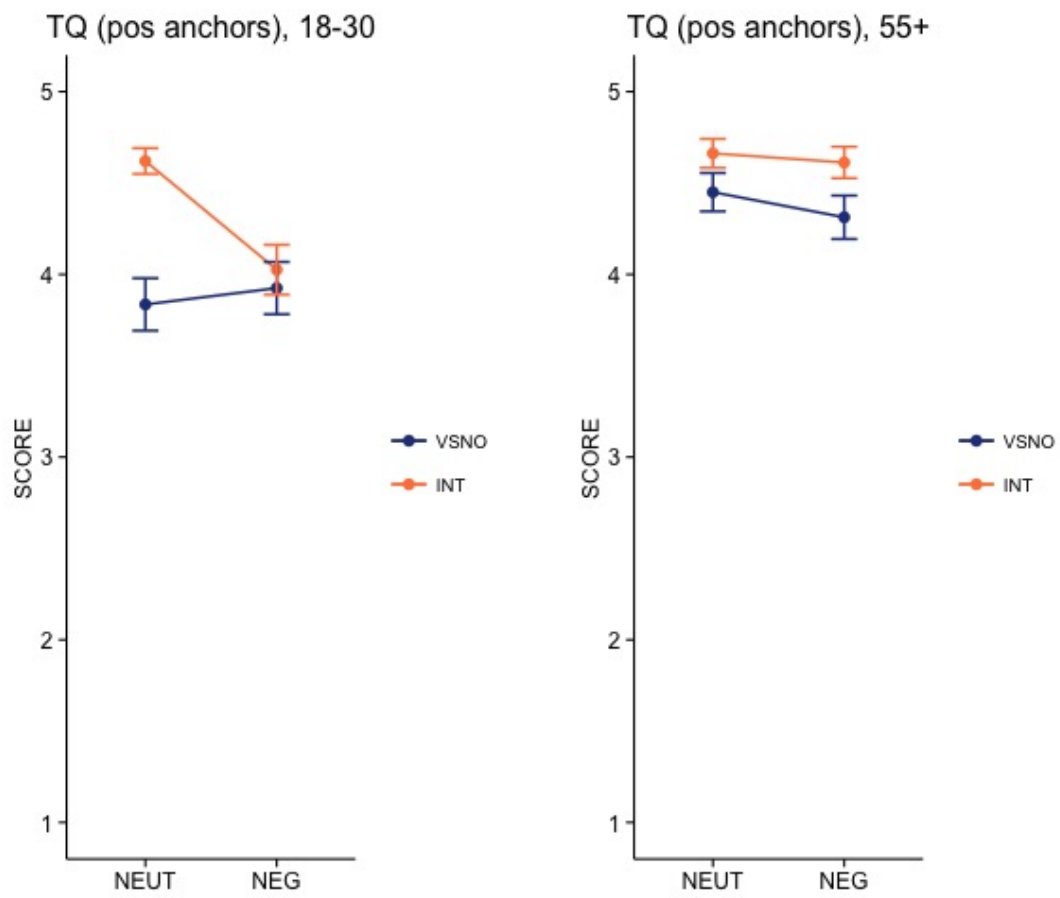


Figure 3.47: Mean ratings for standard construction VSno and *-int* in tag questions on positive anchors in Glasgow, by age and evidential context.

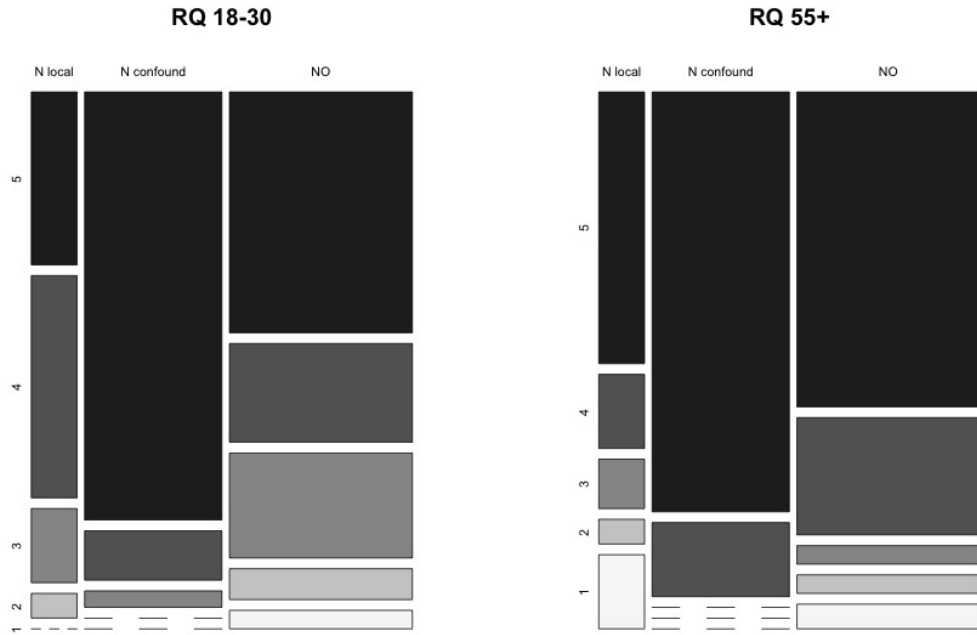


Figure 3.48: Proportions of judgments for *-n* (clearly local and potentially confounded) and VSno in polar rhetorical questions in Shetland, by age.

The instances of *-n* where it is clearly the local variant seem to perform as well for older speakers as they do in matrix biased questions – again, 55% (N=11) 5 ratings. The 18-30 group rated the clear *-n* examples 5 35% (N=7) of the time, with a median of 4 (45%, N=9).

It seems again like there is a difference in how older and younger speakers are rating the clearly local construction in polar rhetorical questions. However, when it comes to the potentially confounded examples, it performs well in both age groups. This may well be a conflation of the local variant with the standard *-n't*, which is attested in this construction in the north of Scotland (Tagliamonte and Smith 2002).

### Glasgow

Examples (152) and (153) show the types of polar rhetorical question construction that participants in Glasgow judged.

(152) I am just back from my holidays. I had a great time, and I'm very tanned. Later that day, I say to you "I can't wait to get away again". You say:

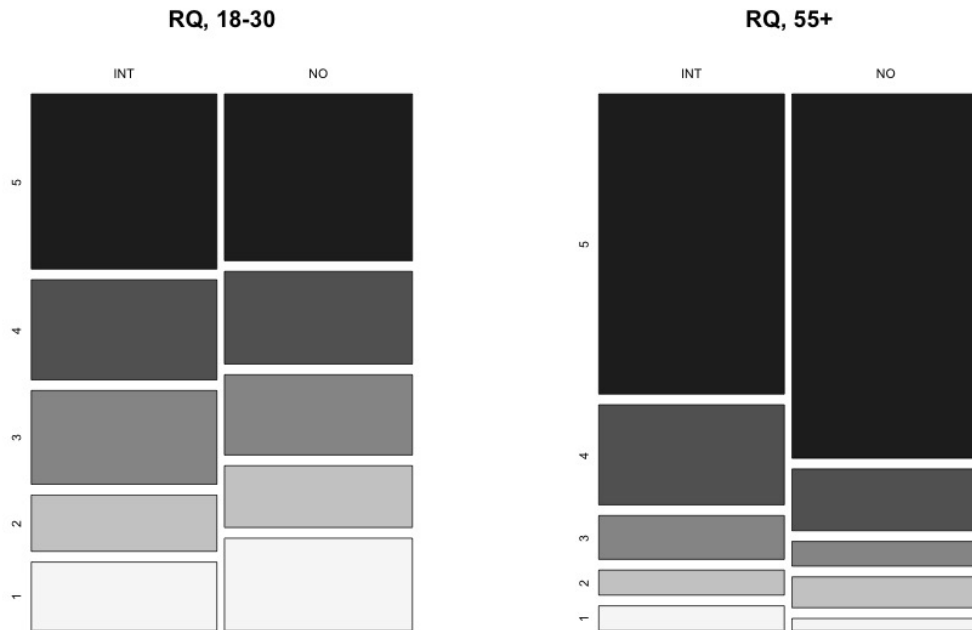


Figure 3.49: Proportions of judgments for *-int* and VSno in polar rhetorical questions in Glasgow, by age.

**Have you no** just been on holiday?! It's my turn.

(153) I have entered some photos in a photography competition. I tell you I could win in one of the rounds, but I have lost all the rounds so far and I am looking pretty sad about it, so you say:

**Kint** [kɪnt] you still win the last one?!

As can be seen in Figure 3.49, overall, participants in the 18-30 group did not rate polar rhetorical questions in general very highly, with 33.75% (N=27) of VSno constructions receiving a 5 rating, and 35% (N=28) of *-int* constructions the same. In the 55+ group, 73.75% (N=59) of VSno examples were rated 5, while 60% (N=48) of *-int* examples were.

It is interesting to note that *-int* and VSno appear to fare as well as each other within age groups, looking at Figure 3.49. The apparent difference is really between the age groups, where polar rhetorical questions in general seem to cause a bit of uncertainty among participants in the 18-30 group.

It is worth considering whether younger participants preferred *-n't*, as we might expect if they were behaving like Tagliamonte & Smith's speakers. For this we can look at



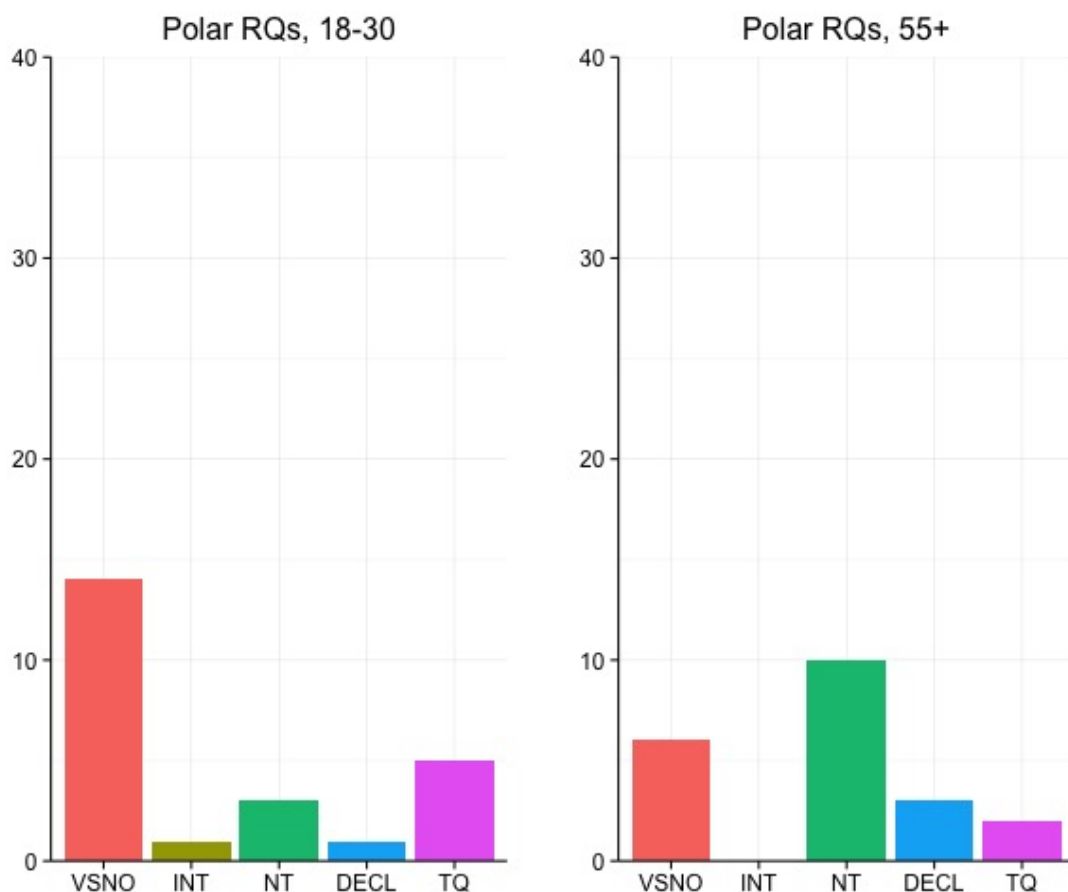


Figure 3.50: Explicit comments given by participants in Glasgow regarding what they would *prefer* to use in a polar rhetorical question. Raw numbers of comments made are displayed on the y-axis. Only forms which were mentioned more than once were included: the interrogative forms VSno, *-int* and *-n't*, and then a plain declarative, and a declarative with a tag. Note that as well as in reference to either VSno or *-int* examples, these explicit comments also came from examples which had both *-int* and *no*.

the explicit comments that speakers gave about their preferences in the rhetorical question context.

As can be seen in Figure 3.50, 18-30 participants most often explicitly expressed a preference for VSno constructions, and it is in fact the 55+ group who most often expressed a preference for *-n't*. Although the numbers are by nature small (recall that it was entirely optional for participants to comment further on their judgments, or give alternative constructions), there does not seem to be any reason to suggest that the 18-30 group strongly prefer a third type of construction – certainly no more than the 55+ group did.

```

Random effects:
  Groups      Name      Variance Std.Dev.
PARTICIPANT (Intercept) 1.9995   1.4140
EXAMPLE      (Intercept) 0.7711   0.8781
Number of groups: PARTICIPANT 20, EXAMPLE 16

Coefficients:
              Estimate Std. Error z value Pr(>|z|)
particleN.LOCAL    -1.0053    0.9091  -1.106  0.2688
particleN.OTHER     1.6145    0.6850   2.357  0.0184 *
AGEY                -1.1030    0.7372  -1.496  0.1346
particleN.LOCAL:AGEY  0.7248    0.7541   0.961  0.3365
particleN.OTHER:AGEY 1.1315    0.6912   1.637  0.1016
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
      Estimate Std. Error z value
112  -4.8591    0.7379  -6.585
213  -3.9874    0.6918  -5.764
314  -2.7053    0.6521  -4.149
415  -0.9505    0.6218  -1.529

```

Figure 3.51: Cumulative link mixed model results for polar rhetorical questions in Shetland. There is an effect of the construction type for the clearly local  $-n$  examples, but no other effects or interactions.

### 3.3.6 Polar rhetorical questions – overall

Running a CLMM with fixed effects of construction type ( $-n$  in both confounded and clearly local contexts, as well as VSno) and age, as well as random intercepts for participant and example in Shetland (as seen in Figure 3.51) shows that there was an effect of construction type – specifically, of the clearly local  $-n$  particle. There were no further effects or interactions. Means are plotted for type of construction by age group, which can be seen in Figure 3.52.

The results from the CLMM are strengthened by t-tests (Bonferroni corrected, significance level = .0167). Clearly local  $-n$  particles are dispreferred when compared to potentially confounded  $-n$  examples:  $t(41.973) = -4.2851$ ,  $p = .0001$ . However, there was no significant difference between the clearly local  $-n$  examples and standard VSno examples:  $t(56.449) = 0.97259$ , n.s..

Fitting with the descriptive statistics above (see Figure 3.48), it seems as though both  $-n$  and VSno constructions are acceptable for speakers, but potentially confounded  $-n$  examples are better than clearly local ones. In that way, participants may be operating more like other speakers in the north of Scotland, using  $-n't$  in rhetorical questions, or retaining an  $-n$  variant in instances where there is also evidence of reduced  $-n't$ . For

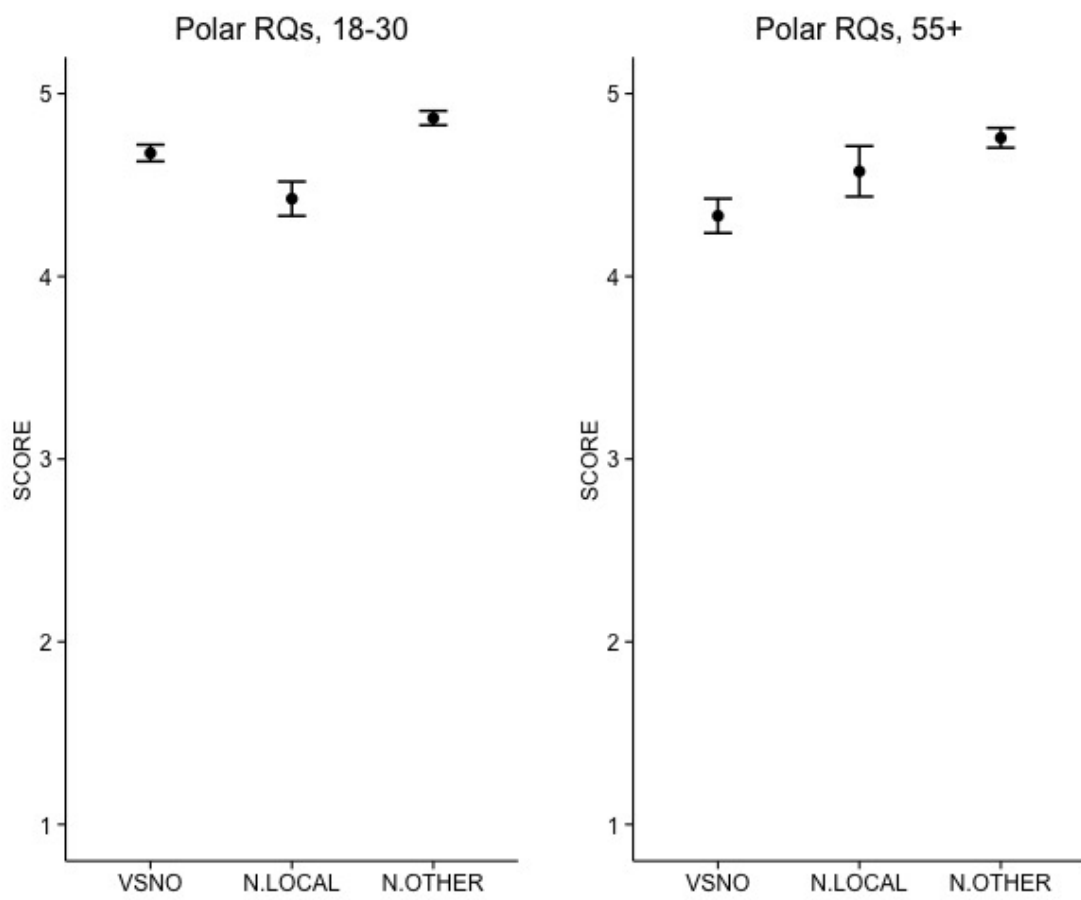


Figure 3.52: Mean ratings for standard construction VSno and  $-n$  in polar rhetorical questions in Shetland, by age.

```

Random effects:
  Groups      Name      Variance Std.Dev.
PARTICIPANT (Intercept) 0.3310  0.5753
EXAMPLE     (Intercept) 0.7385  0.8594
Number of groups: PARTICIPANT 20, EXAMPLE 16

Coefficients:
              Estimate Std. Error z value Pr(>|z|)
intINT      -0.5458    0.5614  -0.972  0.3310
AGEY        -2.1265    0.4395  -4.839 1.31e-06 ***
intINT:AGEY  0.8446    0.4664   1.811  0.0702 .
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
      Estimate Std. Error z value
112  -3.9525    0.5044  -7.837
213  -3.0781    0.4812  -6.396
314  -2.2088    0.4649  -4.751
415  -1.1639    0.4493  -2.591
(2 observations deleted due to missingness)

```

Figure 3.53: Cumulative link mixed model results for polar rhetorical questions in Glasgow. There is an effect of age, but no further effects or interactions.

older speakers there was a median rating of 5 and a mean between 4 and 5 for clearly local examples, but for younger speakers the median rating was 4 (despite also having a mean between 4 and 5, and a high proportion of 5 ratings). Perhaps there is some move towards loss of *-n* in polar rhetorical questions in Shetland dialect, and some instances of perceptual hyperdialectalism: however, this was not shown in the statistical analysis, and for both age groups clearly local examples were as acceptable as the standard construction.

Moving on to the Glasgow data, running a CLMM with fixed effects of construction type (*-int* and VSno) and age, as well as random intercepts for participant and example (as seen in Figure 3.53) shows that there was a main effect of age, but no further effects or interactions. Means are plotted for type of construction by age group, which can be seen in Figure 3.54.

The results from the CLMM corroborate the discussion surrounding the descriptive statistics above. There is some level of acceptability for *-int* in these constructions – as much as for the standard VSno construction, but younger speakers generally rate all polar rhetorical questions lower than older speakers do. This is also clearly supported by a t-test:  $t(290.13) = 6.4607$ ,  $p < .001$ . As discussed above and shown in Figure 3.50, there does not appear to be a third construction that younger speakers prefer. Their mid-range ratings

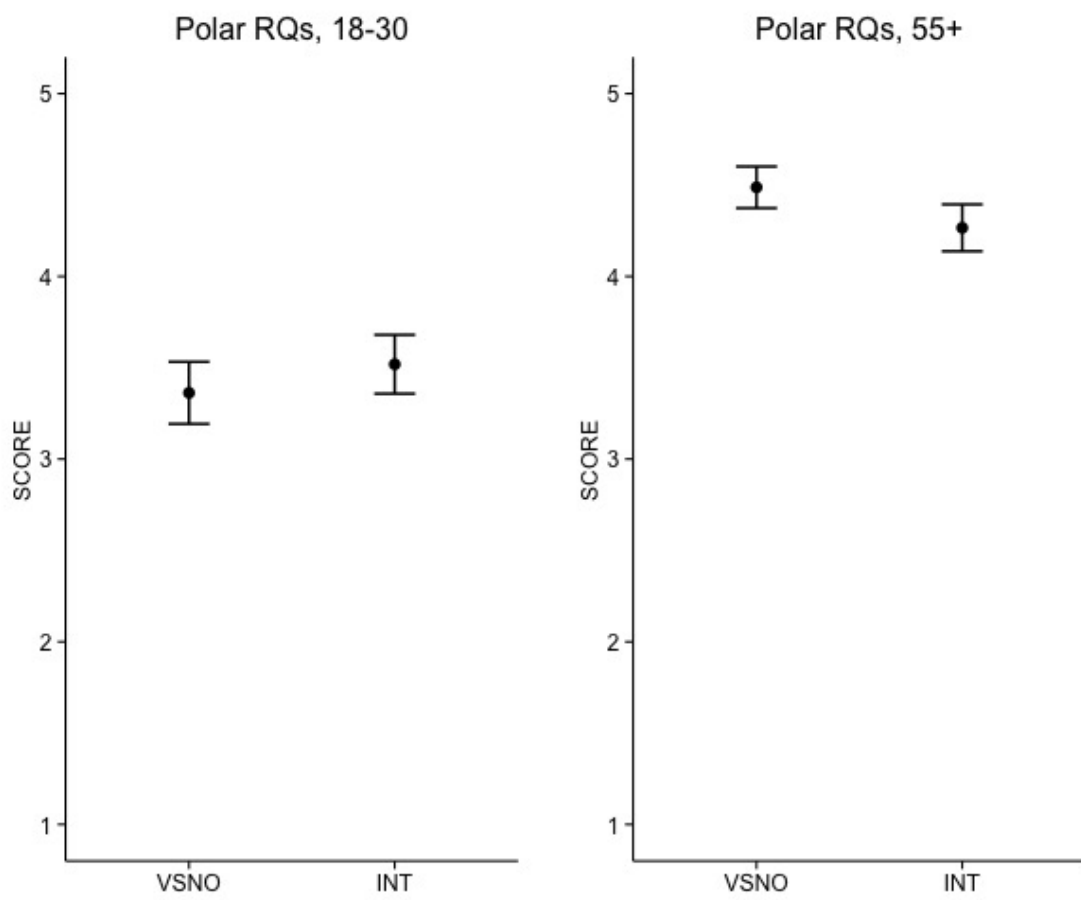


Figure 3.54: Mean ratings for standard construction VSno and *-int* in polar rhetorical questions in Glasgow, by age.

are thus somewhat surprising, and remain unexplained.

Looking across the two locations, there is seemingly some similarity, with both VSno and the local particles (whether *-int* or *-n*) available. In Shetland, the *-n* particle is to some extent preferred, and in Glasgow, younger speakers seem to disprefer rhetorical questions on the whole, but there are no clear preferences for one variant over the other in polar rhetorical questions in either location.

### 3.3.7 Rhetorical *wh*-questions

With polar rhetorical questions, we see that there is a difference in the acceptability of the Shetland *-n* and Glasgow *-int* particles as compared to true negative questions, where neither particle was acceptable. Above I presented the results for true negative *wh*-questions; here, I will present the results for rhetorical *wh*-questions in order to compare with both true negative *wh*-questions and with polar rhetorical questions for each location.

Participants judged both object and subject rhetorical *wh*-questions. As with polar rhetorical questions, *wh*-rhetorical questions are not specifically discussed in the literature. I therefore assume that their ‘standards’ are that object *wh*-questions are verb-subject-*no* constructions, and rhetorical subject *wh*-questions have *-na(e)*.

As well as these standard type examples, participants also judged examples with their local variant, *-n* in Shetland or *-int* in Glasgow, in both types of rhetorical *wh*-question.

#### Shetland

Examples (154) and (155) exemplify the sorts of rhetorical object *wh*-questions that participants judged. Examples (156) and (157) show the kind of rhetorical subject *wh*-questions that participants judged.

#### Rhetorical object *wh*-questions

(154) I am telling you about a friend of mine who always takes on challenges when drunk. I list a long list of silly things that he has done, and you say:

Jeez, what **wid he no** do?!

(155) We have a mutual friend who seems to be really good at everything. She runs, plays in a band and bakes. As well as all this, I tell you that she recently won a poetry competition. You say:

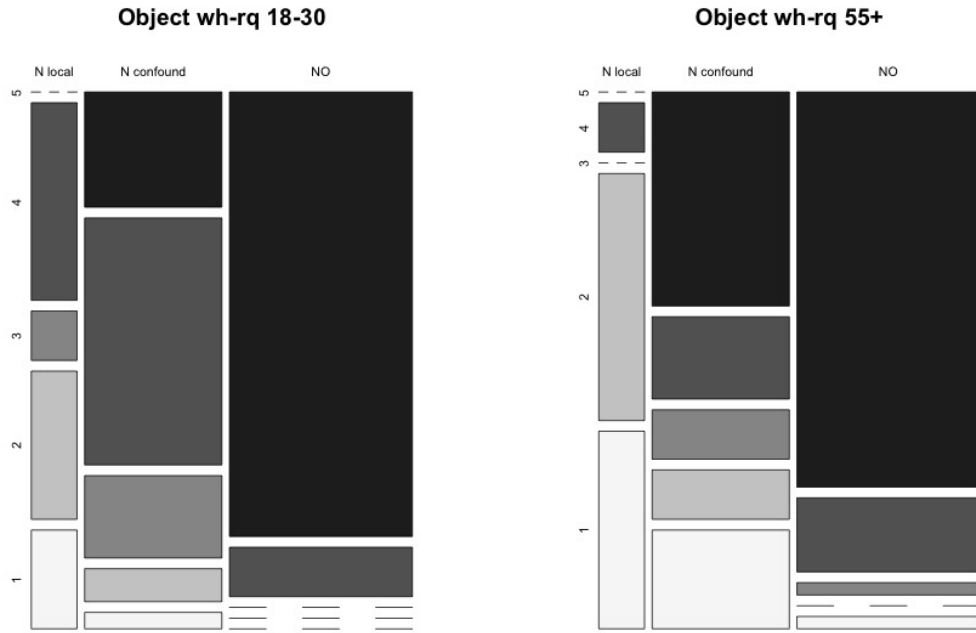


Figure 3.55: Proportion of judgments for  $-n$  (clearly local and potentially confounded) and for VSno in rhetorical object *wh*-questions in Shetland, by age.

Wow, what *can'n* [kɪ.nən] she do?!?

### Rhetorical subject *wh*-questions

(156) I am telling you about something embarrassing that I did earlier. To try and make me feel better, you say:

Who *hasna* done that?!

(157) I want to ask you if you want to go on holiday with me. I am not sure if you want to, but when I do ask you, you are very enthusiastic and you say:

Who *wid'n* [wi.dən] want to go?!

As can be seen in Figure 3.55, VSno in rhetorical object *wh*-questions was rated highly overall, with 80% (N=32) 5 ratings from the 55+ group and 90% (N=36) 5 ratings from the 18-30 group. With  $-n$  in clearly local contexts, there are no 5 ratings from either age group, with a median of 2 (50%, N=5) for the 55+ group and of 4 (40%, N=4) for the 18-30 group. Each participant only judged one example of a clearly local  $-n$ , but from this small set of data it seems as though it is not available in this context.

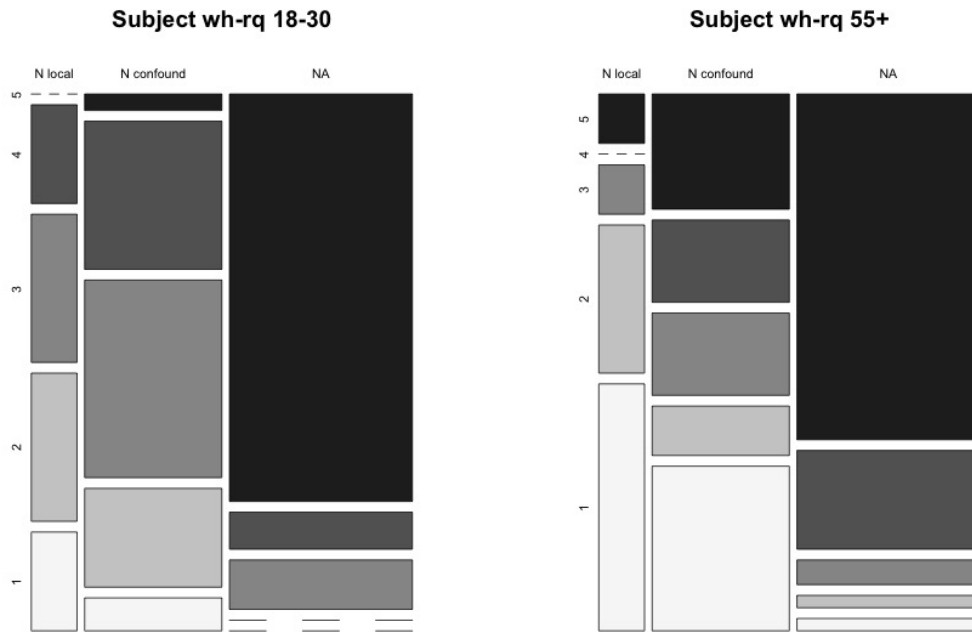


Figure 3.56: Proportion of judgments for  $-n$  (clearly local and potentially confounded) and for  $-na$  in rhetorical subject  $wh$ -questions in Shetland, by age.

The picture for the potentially confounded  $-n$  cases is more complicated. For the 55+ group, the median rating is in fact 5 (43%,  $N=13$ ), with 30% ( $N=9$ ) 1 or 2 ratings. For the 18-30 group, it is 4 (50%,  $N=15$ ), with 23.3% ( $N=7$ ) 5 ratings and 10% ( $N=3$ ) 1 or 2 ratings.

In rhetorical subject  $wh$ -questions, as can be seen in Figure 3.56, standard constructions with  $-na$  were rated highly, with 70% ( $N=28$ ) 5 ratings from the 55+ group and 82.5% ( $N=33$ ) 5 ratings from the 18-30 group. Clearly local cases of  $-n$  had a median rating of 1 (50%,  $N=5$ ) for the 55+ group and 30% ( $N=3$ ) 2 and 3 ratings respectively for the 18-30 group. Again, potentially confounded cases were a little more complicated. For the 55+ group, the median rating was 1 (33.3%,  $N=10$ ) but there were nevertheless 23.3% ( $N=7$ ) 5 ratings. For the 18-30 group, it is clearer that the confounded variants are also unacceptable, with only 1 (3.3%) 5 rating and a median of 3 (40%,  $N=12$ ).

Just like true negative  $wh$ -questions, then, the picture from the descriptive statistics is somewhat mixed. For clearly local  $-n$  particles, the results suggest that the particle is unacceptable in rhetorical  $wh$ -questions in both object and subject cases. However, for older speakers in particular, the confounded cases appear to cause some confusion. In



subject rhetorical *wh*-questions, there is no clear rejection or acceptance for the confounded cases; in object cases, there appears to be some limited acceptance. For younger speakers, however, there is clear rejection of the confounded cases of *-n* in subject rhetorical *wh*-questions; the picture is slightly more complicated in object *wh*-questions but the median rating is still a clear 4 (see previous section on interpreting the scale).

### Glasgow

Examples (158) and (159) exemplify the sorts of rhetorical object *wh*-questions that participants judged. Examples (160) and (161) show the kind of rhetorical subject *wh*-questions that participants judged.

### Rhetorical object *wh*-questions

(158) I am telling you about a friend of mine who always takes on challenges when drunk. I list a long list of silly things that he has done, and you say:

Jeez, what **wid he *no*** do?!

(159) We have a mutual friend who seems to be really good at everything. She runs, plays in a band and bakes. As well as all this, I tell you that she recently won a poetry competition. You say:

Wow, what ***kint*** [kin?] she do?!?

### Rhetorical subject *wh*-questions

(160) I am telling you about something embarrassing that I did earlier. To try and make me feel better, you say:

Who ***hasnae*** done that?!

(161) I want to ask you if you want to go on holiday with me. I am not sure if you want to, but when I do ask you, you are very enthusiastic and you say:

Who ***wint*** [win?] want to go?!

As can be seen in Figure 3.57, standard VS<sub>no</sub> constructions were rated highly in rhetorical object *wh*-questions, with 76.9% (N=30) 5 ratings from the 55+ group and 72.5% (N=29) 5 ratings from the 18-30 group. There were no 1 or 2 ratings in either group. For *-int*, the ratings are less clear cut. For the 55+ group, the median rating was 4 (38.5%, N=15) with 33.3% (N=13) 1 or 2 ratings. For the 18-30 group things are a little

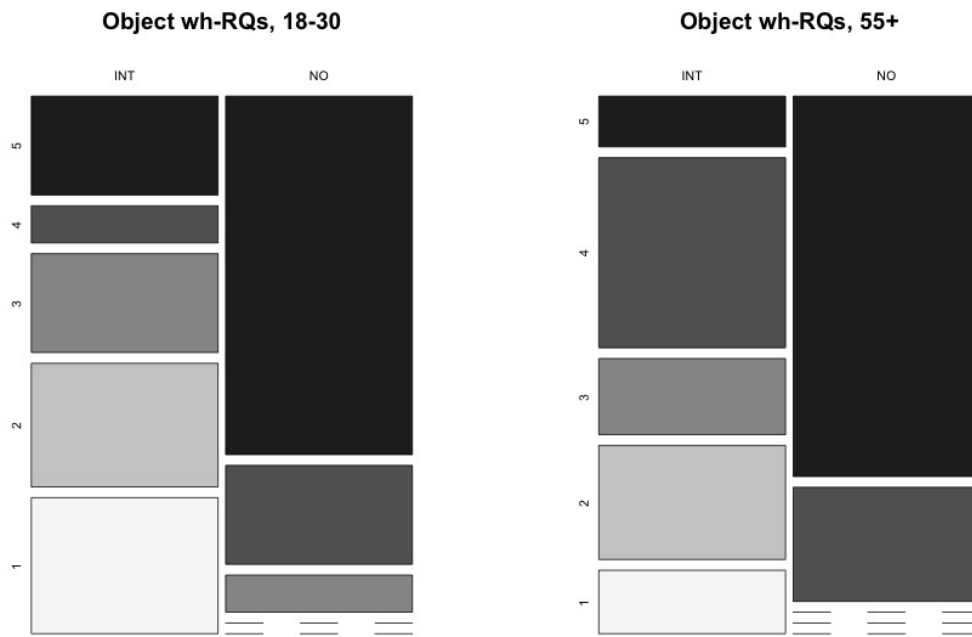


Figure 3.57: Proportion of judgments for *-int* and for VSno in rhetorical object *wh*-questions in Glasgow, by age.

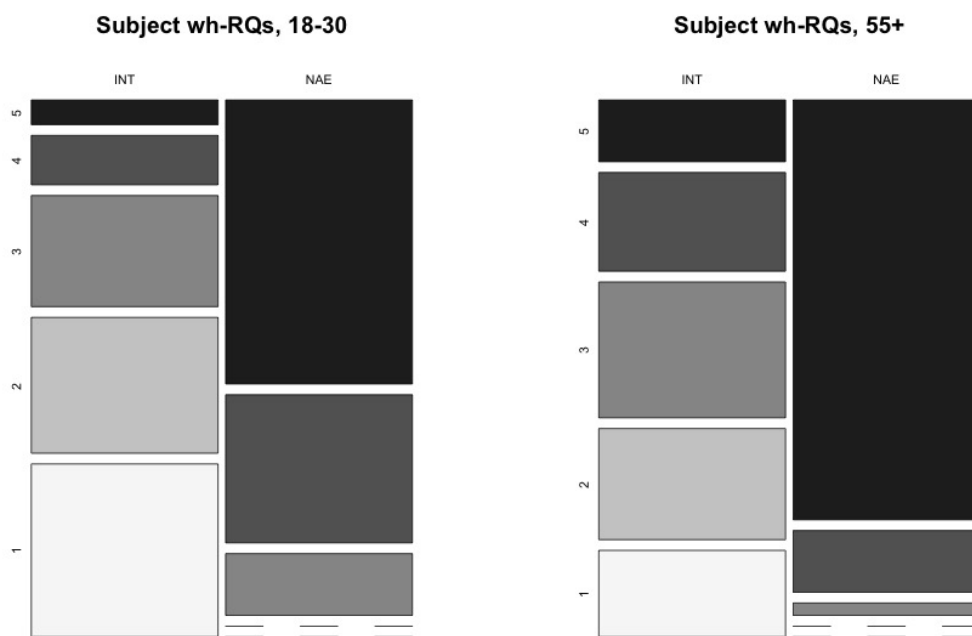


Figure 3.58: Proportion of judgments for *-int* and for *-nae* in rhetorical subject *wh*-questions in Glasgow, by age.

```

Random effects:
Groups      Name      Variance Std.Dev.
PARTICIPANT (Intercept) 0.8295  0.9108
EXAMPLE     (Intercept) 0.1491  0.3862
Number of groups: PARTICIPANT 20, EXAMPLE 16

Coefficients:
              Estimate Std. Error z value Pr(>|z|)
intN          -2.63987   0.64924  -4.066 4.78e-05 ***
intN.LOCAL    -5.32490   0.88401  -6.024 1.71e-09 ***
AGEY           1.08547   0.82201   1.321  0.187
SUBOBSUBJ    -0.63389   0.61522  -1.030  0.303
intN:AGEY     -0.93061   0.86802  -1.072  0.284
intN.LOCAL:AGEY  0.05662   1.07653   0.053  0.958
intN:SUBOBSUBJ -0.54427   0.87519  -0.622  0.534
intN.LOCAL:SUBOBSUBJ  0.48006   1.19249   0.403  0.687
AGEY:SUBOBSUBJ -0.42101   0.90015  -0.468  0.640
intN:AGEY:SUBOBSUBJ  0.33743   1.13549   0.297  0.766
intN.LOCAL:AGEY:SUBOBSUBJ 0.22076   1.46676   0.151  0.880
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
      Estimate Std. Error z value
112  -5.4592   0.6378  -8.559
213  -4.3653   0.6084  -7.175
314  -3.2486   0.5817  -5.584
415  -1.6344   0.5475  -2.985

```

Figure 3.59: Cumulative link mixed model results for rhetorical *wh*-questions in Shetland. There is an effect of construction type (*-n*, whether clearly local or potentially founded, and the standard constructions), but no further effects or interactions.

clearer, with a median rating of 1 (27.5%, N=11) but 52.5% (N=21) ratings of either 1 or 2. Nevertheless, there were also 20% (N=8) ratings of 5.

For rhetorical subject *wh*-questions, again, the standard construction – in this case, *-nae* – was acceptable for old speakers. 87.2% (N=34) of the 55+ group’s judgments were for 5. For the 18-30 group, 57.5% (N=23) were rated 5, with no 1 or 2 ratings in either age group. These results can be seen in Figure 3.58. Results for *-int* are more varied. For the 55+ group, there is a median rating of 3 (27.5%, N=11), but 40% (N=16) 1 or 2 ratings, and only 12.5% (N=5) 5 ratings, suggesting this is not particularly acceptable. For the 18-30 group, the median rating is 1 (35%, N=14) with a total of 64.5% (N=25) 1 or 2 ratings and only 5% (N=2) 5 ratings.

### 3.3.8 Rhetorical *wh*-questions – overall

Running a CLMM with fixed effects of construction type (*-n* or standard), age and type of *wh*-questions (subject or object) as well as random intercepts for participant and example with the Shetland data (as seen in Figure 3.59) shows that there was a main effect of construction type (standard vs confounded *-n* vs clearly local *-n*), but no further effects or interactions.

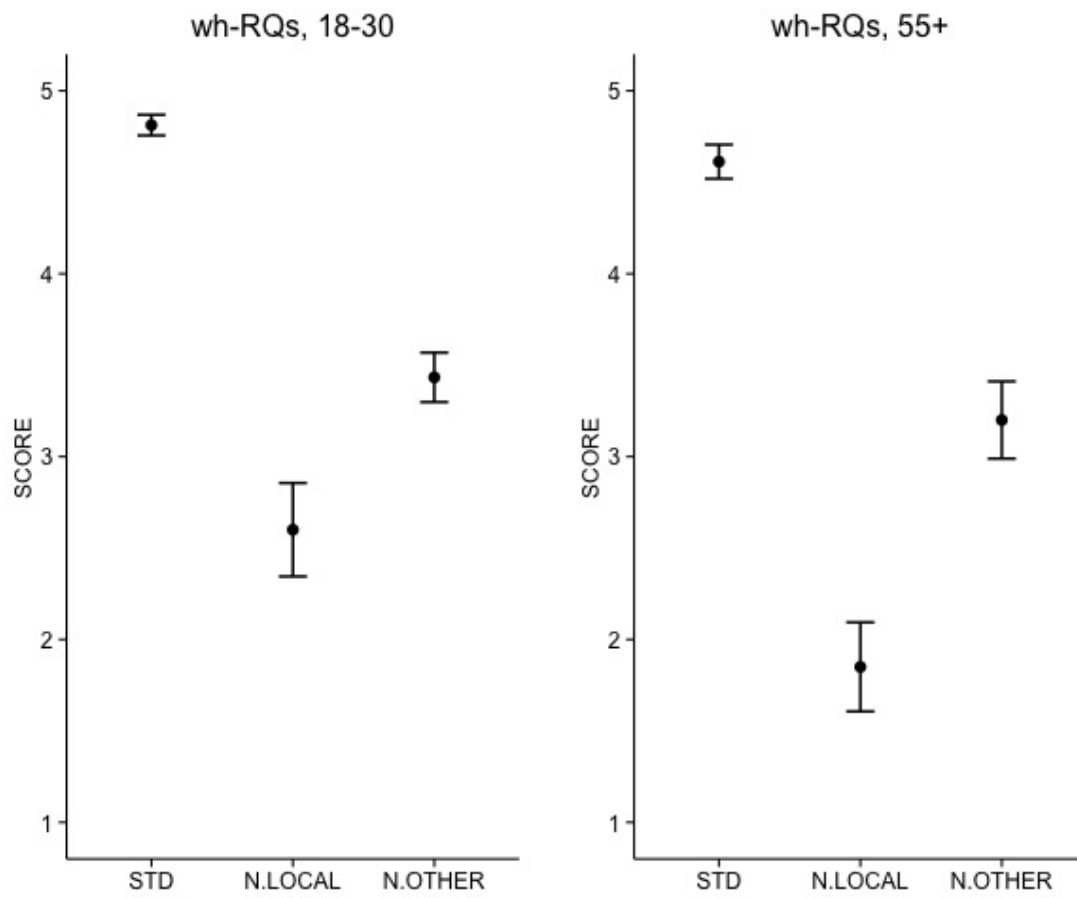


Figure 3.60: Mean ratings for standard constructions (either VSno or *-na*) and *-n*, whether clearly local or potentially confounded with the standard, in rhetorical *wh*-questions in Shetland, by age.

These model results are supported by paired t-test comparisons (Bonferroni corrected, significance level = .0167). The standard constructions are preferred to potentially confounded  $-n$  examples:  $t(164.64) = 10.207$ ,  $p < .001$ , while potentially confounded  $-n$  examples are preferred to the clearly local  $-n$  examples:  $t(77.898) = 4.9$ ,  $p < .001$ .

These results are shown in the descriptive statistics, but some of the more fine-grained descriptive distinctions do not show up in the statistical model. Though the median ratings varied for potentially confounded  $-n$  in subject and object rhetorical *wh*-questions, particularly for older speakers, it is only the overall construction type that significantly affects participants' judgments.

For clearly local  $-n$ , the mean rating was 2.23 – definitely in the unacceptable range – and for standard constructions it was 4.713, clearly in the acceptable range. For potentially confounded constructions, the mean rating was 3.317. Certainly, this is not in the ‘acceptable’ region, but it is mid-range.

There are, I believe, two possible explanations for these results, looking at the descriptive statistics. Firstly, it is possible that  $-n$ , for older speakers, is somewhat acceptable in rhetorical *wh*-questions – after all, they do have a median rating of 5 for these contexts. However, it is notable that this is not the case for younger speakers; it is also worth noting that for clearly local  $-n$  examples,  $-n$  is *not* acceptable in rhetorical *wh*-questions. This second possibility is that older speakers were particularly confounded, especially in the object *wh* cases. This second possibility is supported by the clearly local  $-n$  results, the behaviour of the younger speakers, and the results of the true negative *wh*-questions as presented above, as well as the results for polar rhetorical questions, presented in Figure 3.52.

Moving on to the Glasgow data, running a CLMM with fixed effects for construction type ( $-int$  or standard constructions (VSno or  $-nae$ ), age and *wh*-question type (subject or object) shows a main effect of construction type, and no other effects or interactions (see Figure 3.61).

These results are supported by a paired t-test, with standard constructions significantly preferred to  $-int$ :  $t(157) = 17.277$ ,  $p < .001$ .

### 3.3.9 Exclamatives

As highlighted in Zanuttini and Portner (2003), exclamatives have a number of key properties, including a) the availability of scalar implicature and b) factivity. Due to the

```

Random effects:
Groups      Name      Variance Std.Dev.
PARTICIPANT (Intercept) 0.5598  0.7482
EXAMPLE    (Intercept) 0.3582  0.5985
Number of groups: PARTICIPANT 20, EXAMPLE 16

Coefficients:
                Estimate Std. Error z value Pr(>|z|)
intINT          -3.6673    0.6899  -5.316 1.06e-07 ***
AGEY            -0.3910    0.6438  -0.607  0.544
SUBJOBJSUBJ     0.4655    0.7518   0.619  0.536
intINT:AGEY     -0.2686    0.6931  -0.388  0.698
intINT:SUBJOBJSUBJ -0.8186    0.9526  -0.859  0.390
AGEY:SUBJOBJSUBJ -1.2069    0.7898  -1.528  0.126
intINT:AGEY:SUBJOBJSUBJ 0.8480    0.9795   0.866  0.387
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
      Estimate Std. Error z value
112  -5.8057    0.6658  -8.719
213  -4.4549    0.6300  -7.072
314  -3.2044    0.5998  -5.342
415  -1.5606    0.5658  -2.758
(2 observations deleted due to missingness)

```

Figure 3.61: Cumulative link mixed model results for rhetorical *wh*-questions in Glasgow. There is an effect of construction type (*-int* or the standard constructions VSno/*-nae*), but no further effects or interactions.

requirement of factivity, modal verbs were excluded from the exclamative examples in order to have as concrete examples as possible. Therefore, the examples were constructed with *do*, *is*, *was* and, in Glasgow only, *have* (in Shetland, as explained in chapter 2, the *have*-perfect examples were given with the *be*-perfect).

## Shetland

Examples (162) and (163) show the types of exclamative construction that participants in Shetland judged.

(162) You are boasting that you can make a really hot chilli. You serve me some, and I try it. My eyes start watering because of the spiciness. You say:

**Is it no hot!**

(163) I am talking about a winter a few years ago when the weather was really bad, and we were both snowed in. You say:

**Wis'n** [wi.zən] that a terrible winter!

As can be seen in Figure 3.63, *-n* is the most highly rated construction in exclamatives in both age groups, with 87.5% (N=35) of examples receiving a 5 rating in

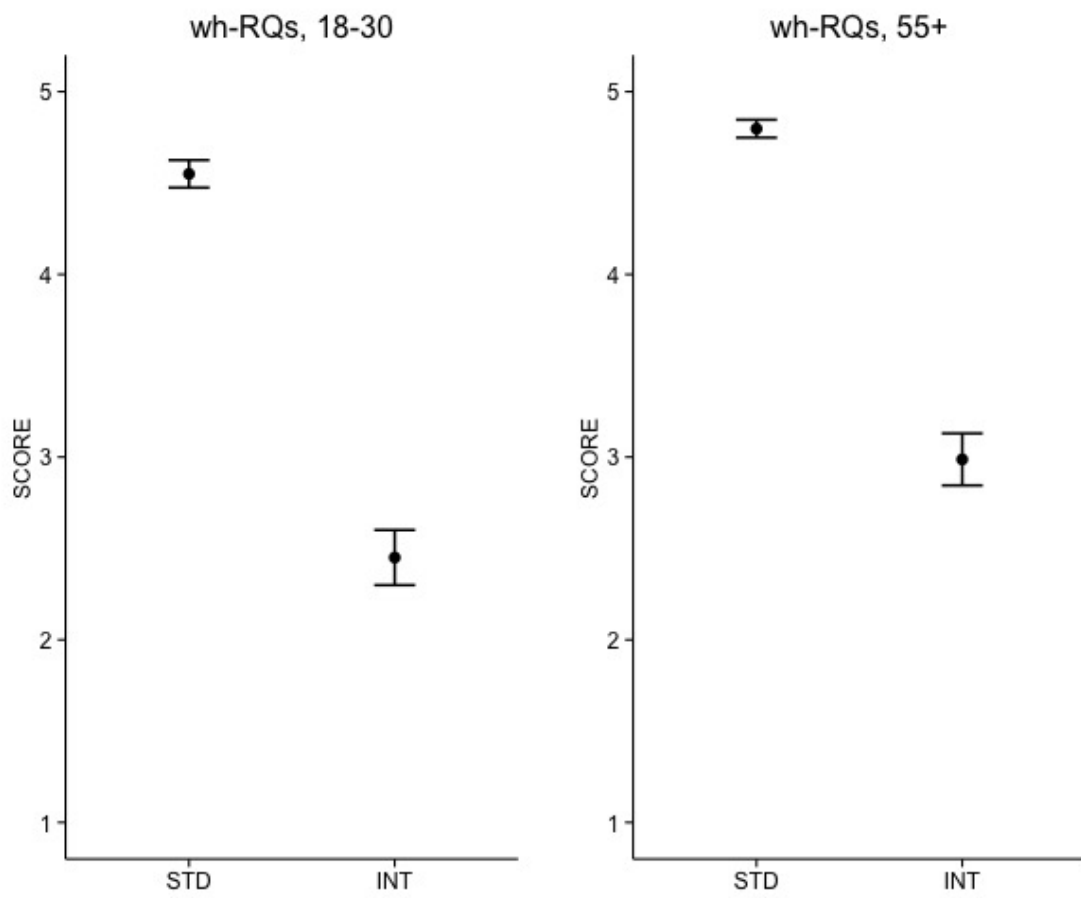


Figure 3.62: Mean ratings for standard constructions (either VSno or *-nae*) and *-int* in rhetorical *wh*-questions in Glasgow, by age.

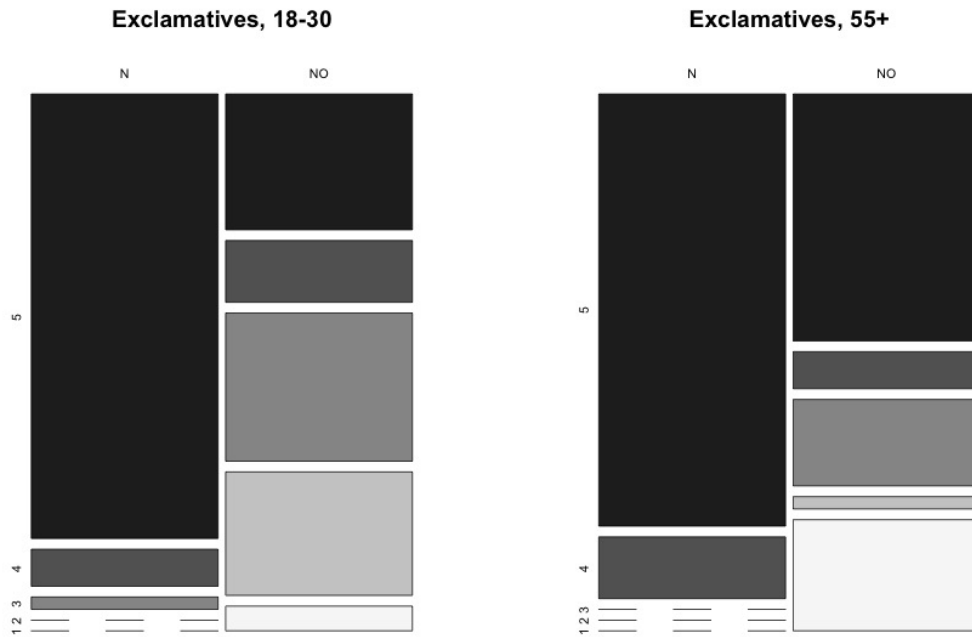


Figure 3.63: Proportions of judgments for *-n* and VSno in exclamatives in Shetland, by age.

the 55+ group, and 90% (N=36) receiving a 5 in the 18-30 group. VSno constructions received fairly varied ratings, with 50% (N=40) receiving a 5 in the 55+ group but only 27.5% (N=11) doing so in the 18-30 group. The median rating for verb-subject-no in the 18-30 group was 3 (30% (N=12)).

Due to the lack of modal verbs in the examples, all of the examples of *-n* exclamatives are ones which could be conflated with the standard *-n't*. However, these examples are clearly acceptable for speakers of both age groups in the dialect. VSno exclamatives seem to be somewhat acceptable for older speakers, but not so for younger speakers.

### Glasgow

Examples (164) and (165) show the types of exclamative construction that participants in Glasgow judged.

(164) You are boasting that you can make a really hot chilli. You serve me some, and I try it. My eyes start watering because of the spiciness. You say:



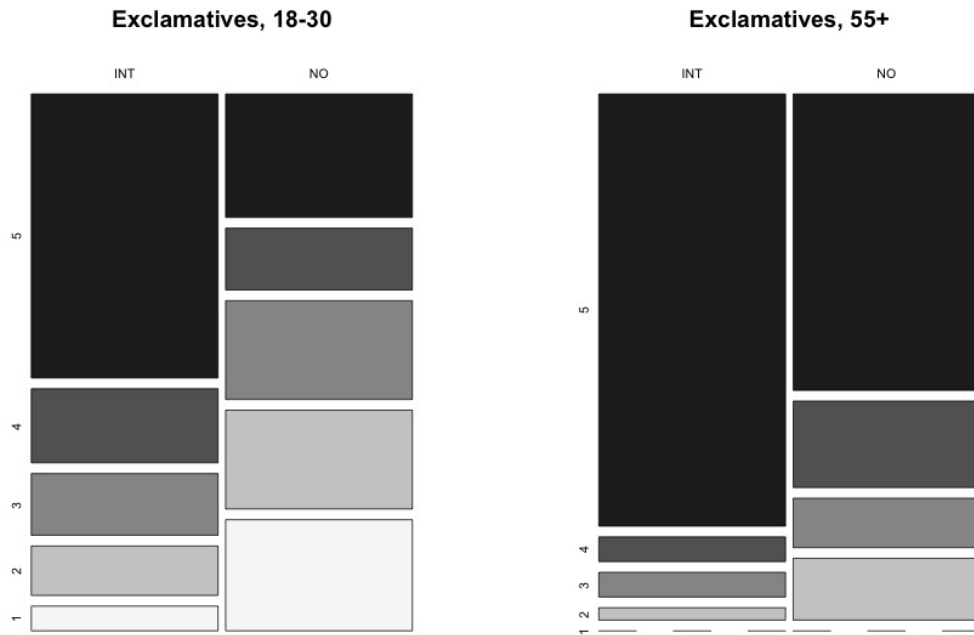


Figure 3.64: Proportions of judgments for *-int* and VSno in exclamatives in Glasgow, by age.

**Is it no hot!**

(165) I am talking about a winter a few years ago when the weather was really bad, and we were both snowed in. You say:

**Wint** [wmt] that a terrible winter!

As can be seen in Figure 3.64, *-int* received higher ratings than VSno in exclamatives in both age groups. 87.5% (N=35) of *-int* examples were rated 5 by 55+ speakers, while 57.5% (N=23) were rated 5 by 18-30 participants. 60% (N=24) of VSno examples were rated 5 by 55+ participants; only 25% (N=10) were by 18-30 participants.

Certainly, it seems as though *-int* is available for speakers in both age groups in exclamative constructions; VSno constructions seem to be ok to some extent for older speakers (with no 1 ratings), but not so much with younger speakers, where 42.5% (N=17) of examples were rated 1 or 2.

```

Random effects:
  Groups      Name      Variance Std.Dev.
PARTICIPANT (Intercept) 1.762    1.327
EXAMPLE.NO  (Intercept) 2.052    1.433
Number of groups: PARTICIPANT 20, EXAMPLE.NO 8

Coefficients:
      Estimate Std. Error z value Pr(>|z|)
int-N      3.4738   1.2507   2.778 0.00548 **
AGEY      -0.7993   0.7647  -1.045 0.29588
int-N:AGEY  0.9497   0.9339   1.017 0.30916
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
      Estimate Std. Error z value
1|2  -3.6144   1.0169  -3.554
2|3  -2.3911   0.9730  -2.457
3|4  -0.5829   0.9277  -0.628
4|5   0.5814   0.9205   0.632

```

Figure 3.65: Cumulative link mixed model results for exclamatives in Shetland. There is an effect of construction type ( $-n$  or VSno), but no further effects or interactions.

### 3.3.10 Exclamatives – overall

Running a CLMM with fixed effects of construction type ( $-n$  and VSno) and age, as well as random intercepts for participant and example in Shetland (as seen in Figure 3.65) shows that there was a main effect of construction type, but no further effects or interactions. Means are plotted for type of construction by age group, which can be seen in Figure 3.66.

In Shetland, there was an overall preference for  $-n$  in exclamatives as opposed to VSno constructions. This can be seen in the descriptive statistics presented above, but also quite clearly in Figure 3.66. This distinction is supported by a paired t-test:  $t(79) = -8.8392$ ,  $p < .001$ . It also seems as though VSno constructions are perhaps *not* acceptable in exclamatives: certainly, their acceptability is considerably lower than in the other three constructions.

As noted above, all of the examples of exclamatives were potentially confounded with  $-n't$  in Shetland. The high rating of  $-n$  may therefore either be attributed to acceptability of  $-n$ , or to a reduced  $-n't$ , or both.

Running a CLMM with fixed effects of construction type ( $-int$  and VSno) and age, as well as random intercepts for participant and example in Glasgow (as seen in Figure 3.67) shows that there was a main effect of age, but no further effects or interactions.

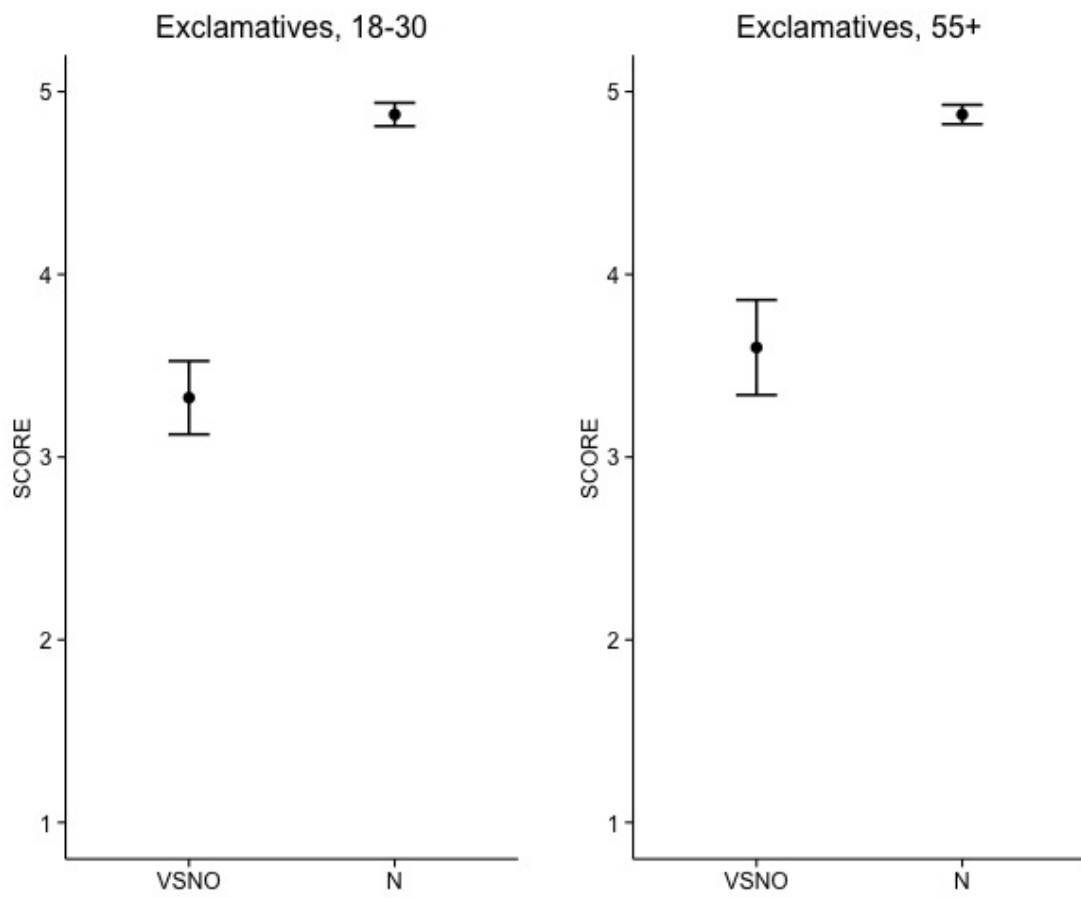


Figure 3.66: Mean ratings for standard construction VSno and  $-n$  in exclamatives in Shetland, by age.

```

Random effects:
  Groups      Name      Variance Std.Dev.
PARTICIPANT (Intercept) 2.044   1.430
EXAMPLE      (Intercept) 1.462   1.209
Number of groups: PARTICIPANT 20, EXAMPLE 8

Coefficients:
              Estimate Std. Error z value Pr(>|z|)
intINT         1.9688    1.0935   1.801  0.07178 .
AGEY          -2.6609    0.8385  -3.173  0.00151 **
intINT:AGEY    0.3620    0.8117   0.446  0.65561
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
              Estimate Std. Error z value
1|2  -4.8303    0.9991  -4.834
2|3  -3.1055    0.9119  -3.406
3|4  -1.9127    0.8745  -2.187
4|5  -0.8537    0.8551  -0.998

```

Figure 3.67: Cumulative link mixed model results for exclamatives in Glasgow. There is an effect of age, but no further effects or interactions.

Means are plotted for type of construction by age group, which can be seen in Figure 3.68.

As with the polar rhetorical questions, above, it appears that younger participants on the whole rated exclamatives lower than older participants did. Surprisingly, however, there is no effect of construction type in the model, despite the fact that both the descriptive statistics and means suggest that there would be.

Overall, therefore, it seems as though both *-int* in Glasgow and *-n* in Shetland are acceptable in exclamatives. For both varieties, it seems (statistically in Shetland and as a tendency in Glasgow) that standard VSno constructions are less acceptable in exclamatives than in other non-canonical interrogative constructions.

### 3.3.11 Tag questions on negative anchors

Once again, with tag questions on negative anchors, there were two evidential contexts in which the examples that participants judged can be grouped into: firstly, the context with a belief and subsequent counterevidence challenging this belief (*a negative evidential context*) and secondly, the context in which there was a belief with no counterevidence (*a neutral evidential context*). Participants judged three constructions here: the standard verb-subject (VS) construction; the local variant (*-n* in Shetland and *-int* in Glasgow), and the local variant plus a lower negation marker (so *-n + no* in Shetland and *-int + no*

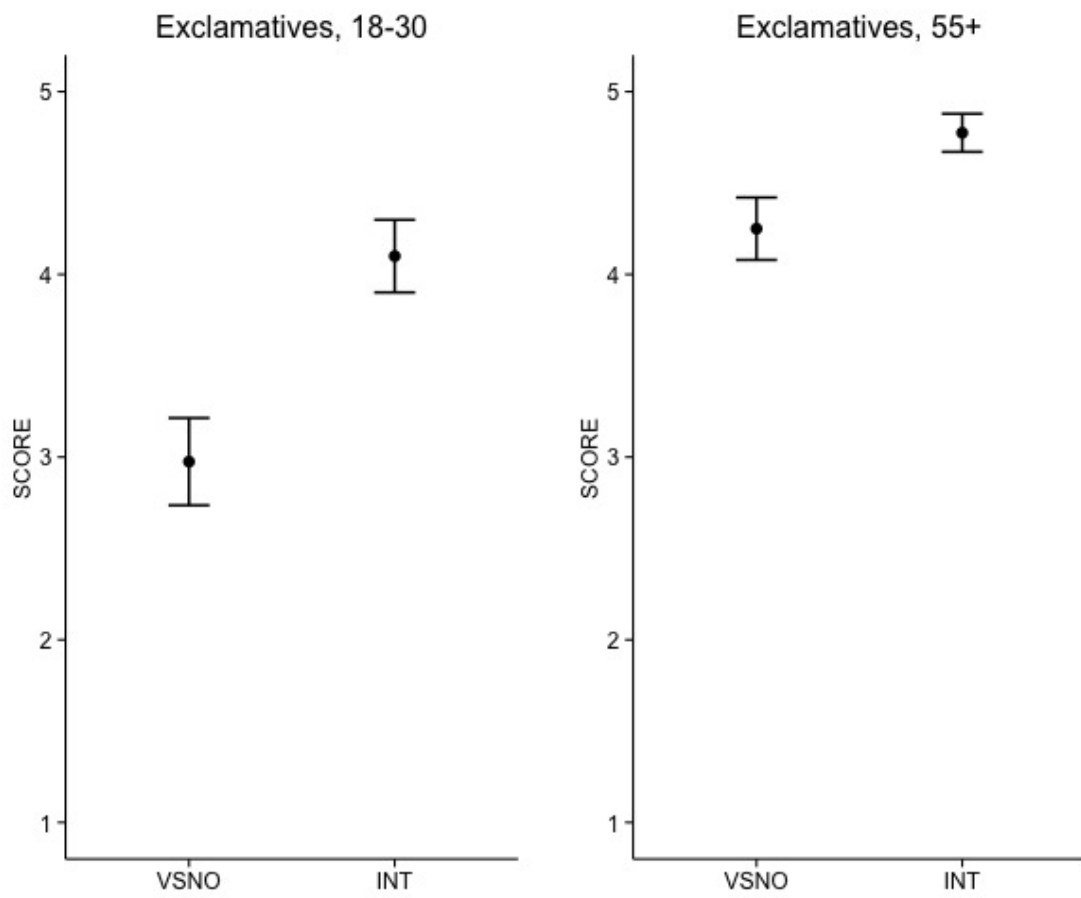


Figure 3.68: Mean ratings for standard construction VSno and *-int* in exclamatives in Glasgow, by age.

in Glasgow).

In the Shetland examples there is still potential for the *-n* variant to be confounded with the standard *-n't*. However, because the *-n + no* variant is already clearly non-standard, I will not separate the judgments for clearly *-n* and potentially confounded contexts.

## Neutral evidential contexts

### Shetland

Examples (166), (167) and (168) show the types of examples that participants in Shetland judged for tag questions on negative anchors in neutral evidential contexts.

(166) We are discussing one of our friends who recently broke up with her partner. You say:

She *isna* got a boyfriend now, **is she?**

(167) There is a concert on this weekend that we have spoken about going to. I haven't mentioned getting tickets yet, and you are about to order some. Before you do, you want to check you do need to get one for me, so you say:

You *irna* got one, **ir'n** [i.rən] you?

(168) For some months, there was a cat that would sit outside my door. You would always say hi to it. However, you realise you haven't see it for a while. You come in and you say:

That cat *isna* been here for a while, **is'n** [i.zən] **it no?**

As can be seen in Figure 3.69, VS tags on negative anchors are rated highly in both age groups, with 81.25% (N=65) 5 ratings in the 55+ group and 82.5% (N=66) 5 ratings in the 18-30 group. On the other hand, *-n* ratings were mixed. Participants in the 55+ group rated examples with *-n* 1 or 2 72.5% (N=58) of the time. Participants in the 18-30 group rated examples 1 or 2 27.5% (N=22) of the time, with a median rating of 4 (33.75%, N=27).

*-n + no* examples received mixed ratings, with 30% (N=24) 5 ratings from participants in the 55+ group, and 36.25% (N=29) 1 or 2 ratings. Only 16.25% (N=13) of *-n + no* examples scored a 5 with participants in the 18-30 group, where the median rating was again 4 (41.25%, N=33), and there were 21.25% (N=17) 1 or 2 ratings.

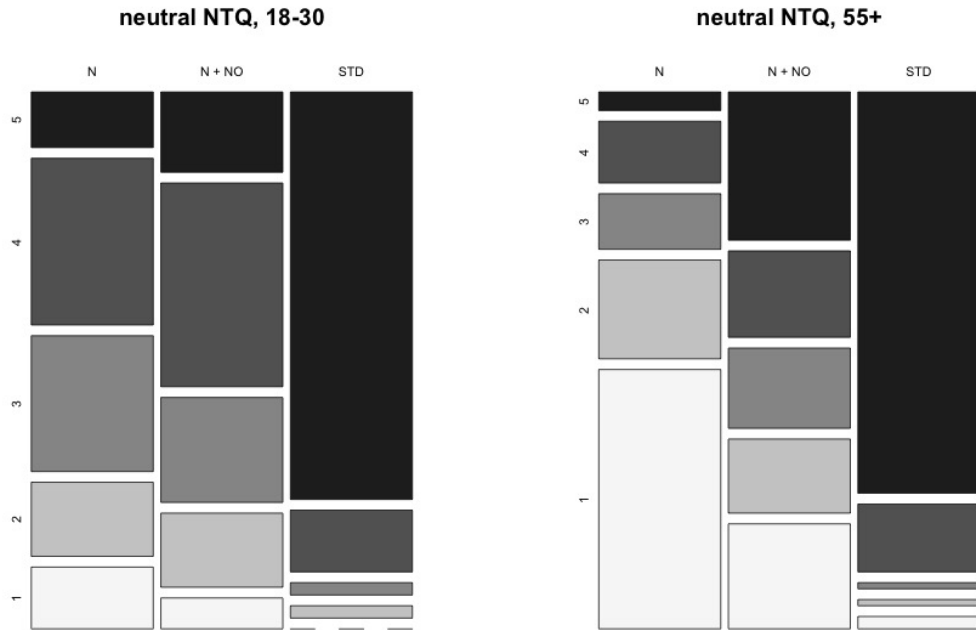


Figure 3.69: Proportions of judgments for  $-n$ ,  $-n + no$  and VS as tag questions on negative anchors in neutral evidential contexts, in Shetland, by age.

It seems as though VS tags are the main acceptable tags for both age groups in this context in Shetland – while  $-n$  tags are clearly not acceptable for either age group (with evidence of perceptual hyperdialectalism in the 18-30 group), the ratings for  $-n + no$  tags were much more mixed for older speakers, with a median rating of 5, but equally with a high percentage of 1 and 2 ratings. Again, there appears to be evidence of perceptual hyperdialectalism with younger speakers’ median rating of 4.

### Glasgow

Examples (169), (170) and (171) show the types of examples that participants in Glasgow judged for tag questions on negative anchors in neutral evidential contexts.

(169) We are discussing one of our friends who recently broke up with her partner. You say:

She hasnae got a boyfriend now, **has she?**

(170) There is a concert on this weekend that we have spoken about going to. I haven’t mentioned getting tickets yet, and you are about to order some. Before you do, you

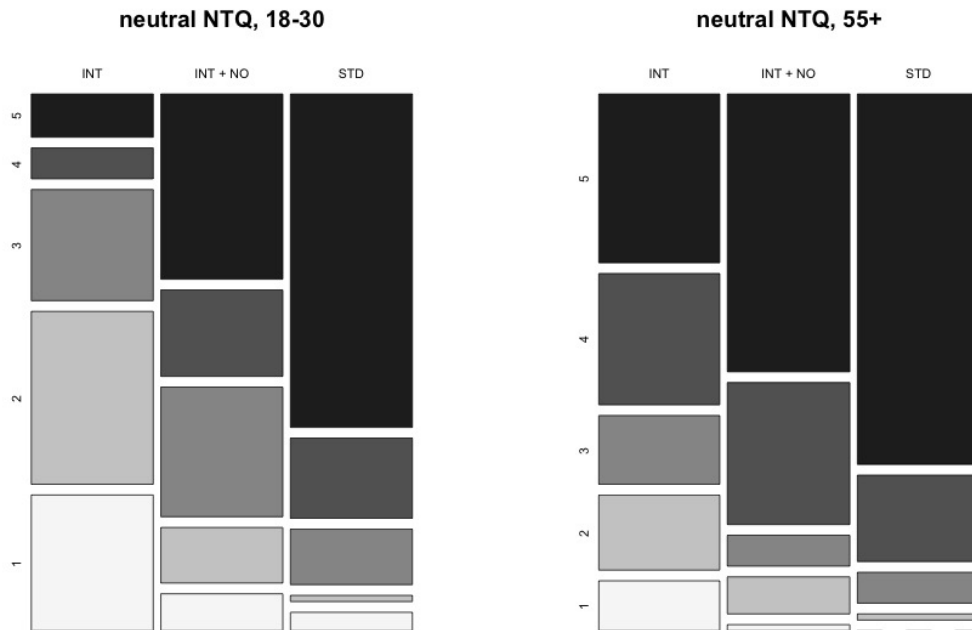


Figure 3.70: Proportions of judgments for *-int*, *-int + no* and VS as tag questions on negative anchors in neutral evidential contexts, in Glasgow, by age.

want to check you do need to get one for me, so you say:

You havnae got one, **hint** [hmt] you?

(171) For some months, there was a cat that would sit outside my door. You would always say hi to it. However, you realise you haven't see it for a while. You come in and you say:

That cat hasnae been here for a while, **hint** [hmt] **it no**?

In neutral contexts, standard VS tags on negative anchors are rated highly by both age groups: 75% (N=60) 5 ratings from the 55+ group, and 67.5% (N=54) from the 18-30 group. *-int* by itself performs poorly in the 18-30 group (62.5% (N=50) 1-2 ratings), while 37.5% (N=30) of *-int + no* examples received a 5 rating (compare with 18.75% (N=15) 1 or 2 ratings).

In the 55+ group, *-int* performs better than it does in the 18-30 group, with 34.2% (N=27) 5 ratings. *-int + no*, however, does even better, with 56.25% (N=45) 5 ratings (compare with only 8.75% (N=7) 1 or 2 ratings).



Clearly, VS tags are acceptable here. *-int + no* tags seem to be acceptable to the 55+ group, but it is less clear whether or not they are acceptable to the younger group. *-int* is clearly unacceptable for the younger group, but it is less clear whether it is accepted by the older group.

## Negative evidential contexts

### Shetland

Examples (172), (173) and (174) show the types of examples that participants in Shetland judged for tag questions on negative anchors in negative evidential contexts.

(172) You told me a secret about one of our friends, and told me not to tell anyone. I agreed. Next time you see her, however, she says that I mentioned it. So later on, you say:

You didna tell her, **did you?**

(173) Our friend Ian has always preferred rugby to football. However, one day we are on the street, and we see him in an Aberdeen shirt. You say:

Ian doesnae like football, **does'n** [dʌ.zən] he?

(174) I have been trying to win a holiday by collecting the codes on the backs of crisp packets. You thought this was ridiculous all along. When the closing date passes, I tell you I am really disappointed not to win. You say:

You didna really think you'd win, **did'n** [dɪ.dən] **you no?**

As can be seen in Figure 3.71, VS tags on negative anchors are rated highly in both age groups, with 78.75% (N=63) 5 ratings in the 55+ group and 85% (N=68) 5 ratings in the 18-30 group. On the other hand, *-n* ratings were mixed. Participants in the 55+ group rated examples with *-n* 1 or 2 63.75% (N=51) of the time. Participants in the 18-30 group rated examples with *-n* 1 or 2 27.5% (N=22) of the time, with a median rating of 4 (37.50%, N=30).

*-n + no* examples in negative contexts were rated much lower than the neutral contexts by the 55+ group, with 57.5% (N=46) of examples given a 1 or 2 rating, and only 8.75% (N=7) scoring a 5 rating. In the 18-30 group, the ratings between negative and neutral contexts appear more similar, with 6.25% (N=5) of examples rated 5, and again, a median of 4 (36.25%, N=29). 30% (N=24) of examples received a 1 or 2 rating from the 18-30 group.

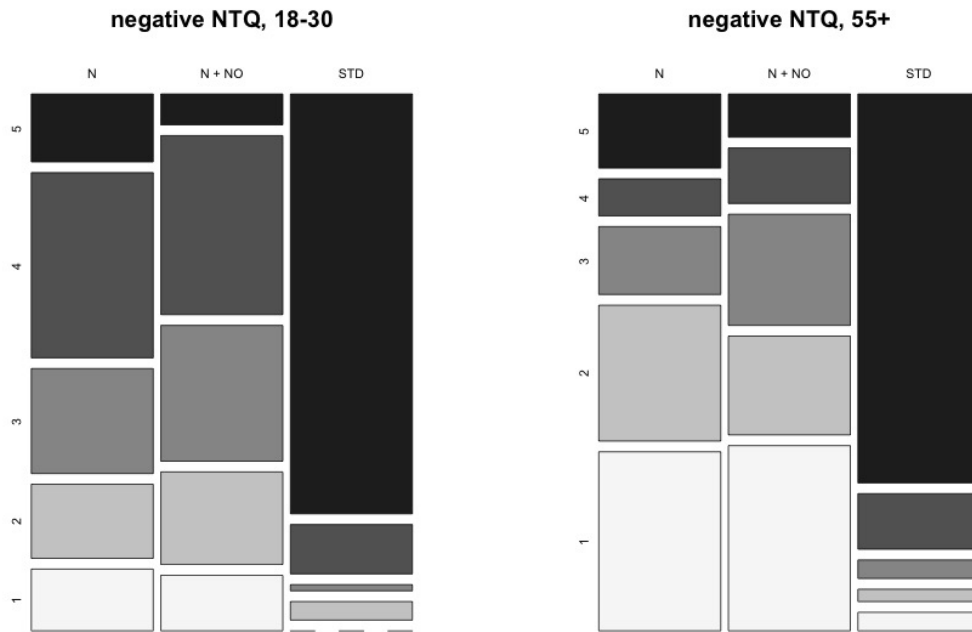


Figure 3.71: Proportions of judgments for  $-n$ ,  $-n + no$  and VS as tag questions on negative anchors in negative evidential contexts, in Shetland, by age.

It seems reasonably clear that only VS tags are acceptable in this context for Shetland speakers in both age groups – neither  $-n$  or  $-n + no$  perform very well at all in the negative evidential context for either age group.

Looking at participants’ comments, too, the standard VS tag is clearly preferable for speakers (Figure 3.72). Although there were small numbers of comments for constructions like ‘I thought he wasn’t coming’ in the 18-30 group, and for ‘Is he coming?!’ in the 55+ group (as well as a surprising handful of comments for VSno constructions), the clear preference in all contexts for all groups is the standard VS construction. Notably, no participant explicitly requested a  $-n + no$  construction. However, similar constructions are attested in the dialect, as we saw in example (81).

### Glasgow

Examples (175), (176) and (177) show the types of examples that participants in Glasgow judged for tag questions on negative anchors in negative evidential contexts.

(175) You told me a secret about one of our friends, and told me not to tell anyone. I

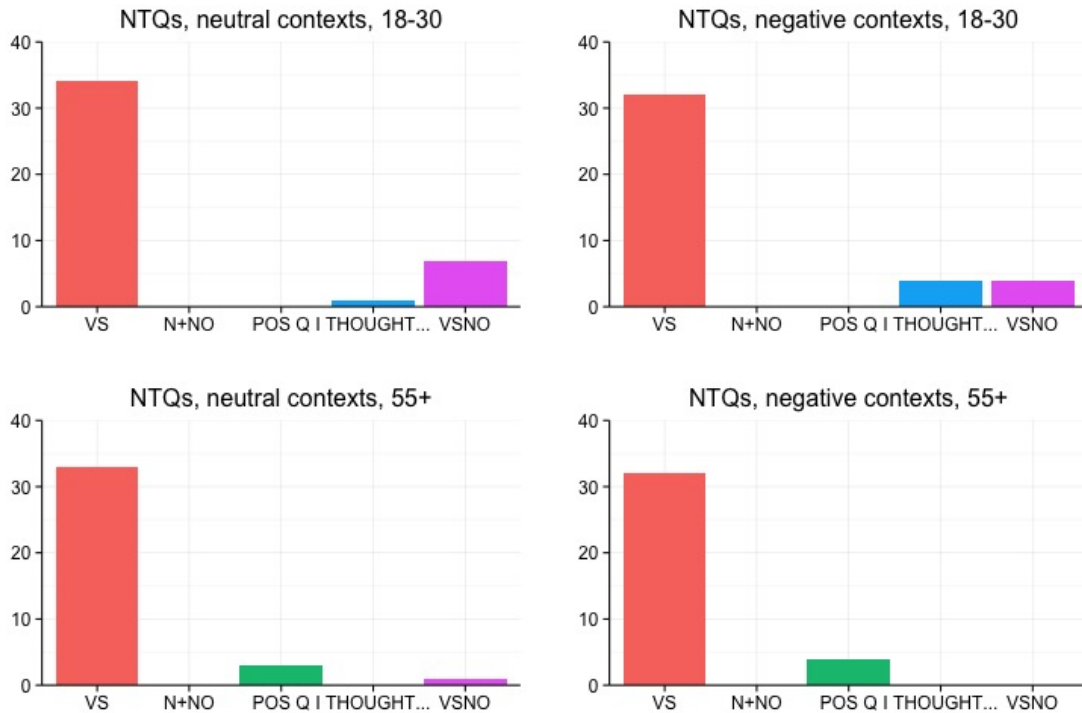


Figure 3.72: Explicit comments given by participants in Shetland regarding what they would *prefer* to use as a tag question on a negative anchor, by evidential context. Raw numbers of comments made are displayed on the y-axis. Only forms which were mentioned more than once were included.

agreed. Next time you see her, however, she says that I mentioned it. So later on, you say:

You didnae tell her, **did you?**

(176) Our friend Kev has always preferred rugby to football. However, one day we are on the street, and we see him in an Aberdeen shirt. You say:

Kev doesnae like football, **dint** [dmt] he?

(177) I have been trying to win a holiday by collecting the codes on the backs of crisp packets. You thought this was ridiculous all along. When the closing date passes, I tell you I am really disappointed not to win. You say:

You didnae really think you'd win, **dint** [dmt] **you no?**

In negative evidential contexts, the standard VS tag again performs well on negative anchors, with 88.75% (N=71) 5 ratings from 55+ participants, and 68.75% (N=55) from

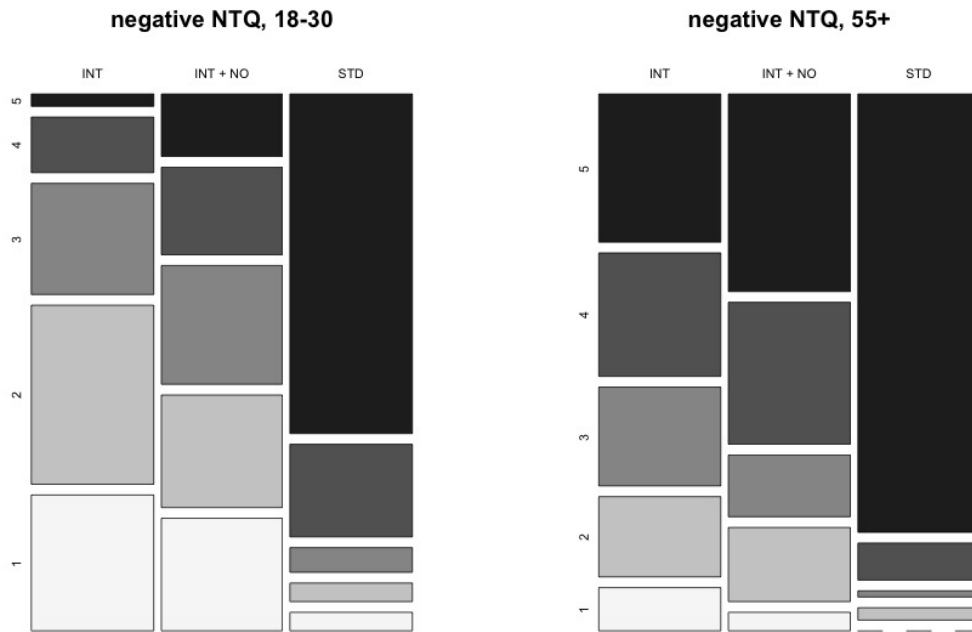


Figure 3.73: Proportions of judgments for *-int*, *-int + no* and VS as tag questions on negative anchors in negative evidential contexts, in Glasgow, by age.

the 18-30 group. 63.75% (N=51) of *-int* examples scored a 1 or 2 from the 18-30 group, while only 25% (N=20) did in the 55+ group (with 30% (N=24) scoring a 5).

*-int + no* tags in negative evidential contexts were rated 1 or 2 in 45% (N=36) cases by the 18-30 group, with a median of 3 (23.75%, N=19). In the 55+ group, 40% (N=32) of examples were rated a 5, with 18.75% (N=15) rated 1 or 2.

Again, it is clear that VS tags are acceptable for participants in both age groups. Both *-int* and *-int + no* are clearly unacceptable for the 18-30 group. In the 55+ group it is less clear, though both are rated lower than the standard VS form, and with less than 50% 5 ratings.

Explicit comments on participants' preferences of tags to attach to a negative anchor are also interesting to investigate, as can be seen in Figure 3.74. The most comments in each context for each age group are for the standard VS tags – however, the picture is less clear than it was in the explicit comments given in Shetland in Figure 3.72. With the 18-30 group, there are a number of explicit preferences for *-int + no*, particularly in the negative evidential context. For the 55+ group, the comments present a clearer preference for VS, but there were still small numbers of comments in favour of *-int + no*, *-n't + no*,

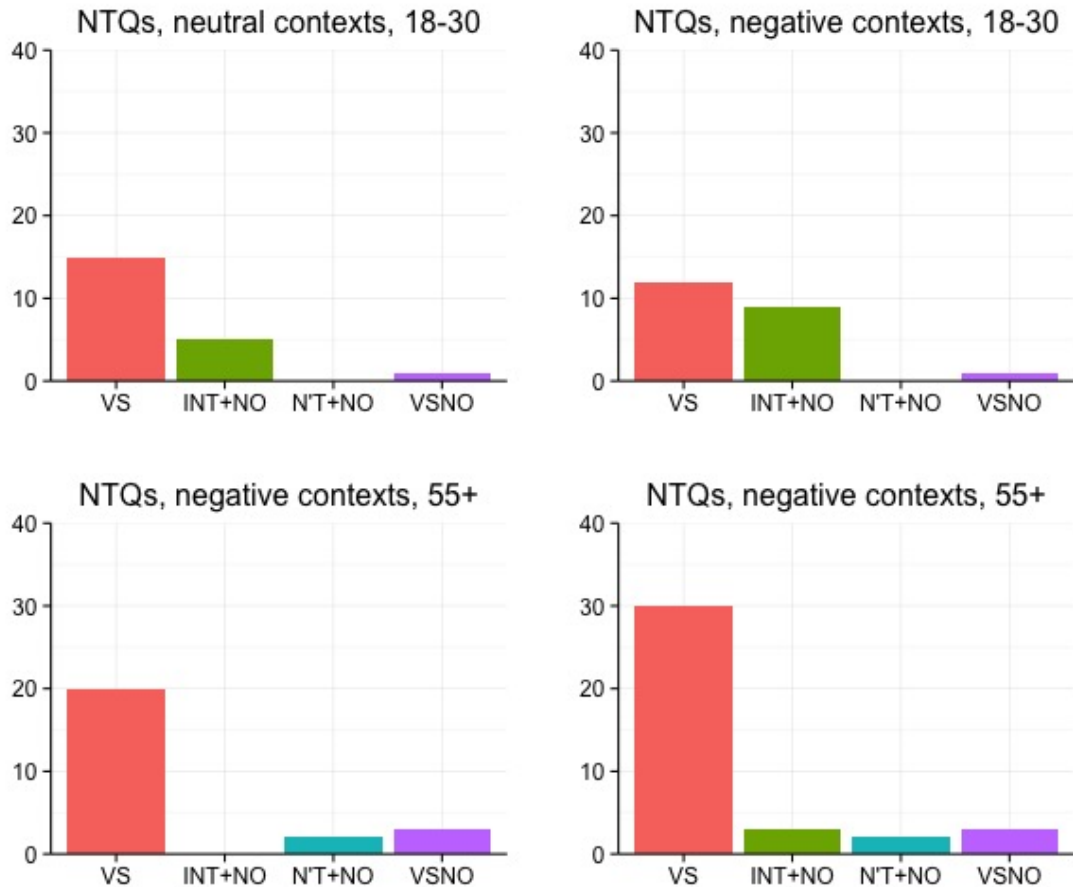


Figure 3.74: Explicit comments given by participants in Glasgow regarding what they would *prefer* to use as a tag question on a negative anchor, by evidential context. Raw numbers of comments made are displayed on the y-axis. Only forms which were mentioned more than once were included.

and again a surprising small number of preferences for VSno constructions.

### 3.3.12 Tag questions on negative anchors – overall

Running a CLMM with fixed effects of construction type ( $-n$ ,  $-n + no$  and standard VS), evidential context and age, as well as random intercepts for participant and example in Shetland (as seen in Figure 3.75) shows there were main effects of construction type (whether VSno,  $-n$  or  $-n + no$ ). There were no further effects or interactions. Means are plotted for type of construction by age group, which can be seen in Figure 3.76.

The results of the CLMM are supported by paired t-tests (Bonferroni corrected, significance level = .0167). VS is preferred to  $-n$ :  $t(507.21) = 23.991$ ,  $p < .001$ , and is also preferred over  $-n + no$ :  $t(511.33) = 20.611$ ,  $p < .001$ .  $-n + no$  is preferred to  $-n$ :

```

Random effects:
Groups      Name      Variance Std.Dev.
EXAMPLE.NO (Intercept) 0.1899  0.4358
PARTICIPANT (Intercept) 1.1054  1.0514
Number of groups:  EXAMPLE.NO 48,  PARTICIPANT 20

Coefficients:
              Estimate Std. Error z value Pr(>|z|)
intN          -4.80895    0.44830 -10.727 <2e-16 ***
intN_NO       -4.89585    0.44860 -10.914 <2e-16 ***
EVIDENCENEUT   0.39401    0.47714   0.826  0.4089
AGEY           0.39177    0.64284   0.609  0.5422
intN:EVIDENCENEUT -1.19304    0.61164 -1.951  0.0511 .
intN_NO:EVIDENCENEUT 1.16192    0.61247  1.897  0.0578 .
intN:AGEY       0.93177    0.52643  1.770  0.0767 .
intN_NO:AGEY    0.60312    0.52332  1.152  0.2491
EVIDENCENEUT:AGEY -0.01343    0.63589 -0.021  0.9831
intN:EVIDENCENEUT:AGEY 0.64991    0.75918  0.856  0.3920
intN_NO:EVIDENCENEUT:AGEY -0.92072    0.75740 -1.216  0.2241
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
      Estimate Std. Error z value
112  -5.7168    0.5059 -11.301
213  -4.4259    0.4943  -8.955
314  -3.2108    0.4848  -6.623
415  -1.4523    0.4717  -3.079

```

Figure 3.75: Cumulative link mixed model results for tag questions on negative anchors in Shetland. There is an effect of construction type ( $-n$ ,  $-n + no$  or VS), but no further effects or interactions.

$t(637.88) = -2.9415$ ,  $p = .003$ .

It seems, therefore, that although there is a tendency among the 55+ group for  $-n + no$  to be preferred in neutral evidential contexts, this is not statistically significant.  $-n + no$  is preferred, overall, to  $-n$ , but neither perform especially well when compared to VS constructions.

Running a CLMM with fixed effects of construction type ( $-int$ ,  $-int + no$  and standard VS), evidential context and age, as well as random intercepts for participant and example in Glasgow (as seen in Figure 3.77) shows there were main effects of construction type (whether VSno,  $-int$  or  $-int + no$ ). There was also a main effect of age, and an interaction between  $-int + no$  and evidential context. There were no further effects or interactions. Means are plotted for type of construction by age group, which can be seen in Figure 3.78.

In general, older speakers rated the three constructions higher than younger speakers did. However, we can also see that for participants in both age groups, there is more acceptability of  $-int + no$  in neutral contexts than negative evidential contexts. This is supported by a paired t-test:  $t(158) = -5.7426$ ,  $p < .001$ . Furthermore, we see that VS is preferred to both  $-int$  ( $t(526.46) = 18.352$ ,  $p < .001$ ) and  $-int + no$  ( $t(538.99) = 10.654$ ,

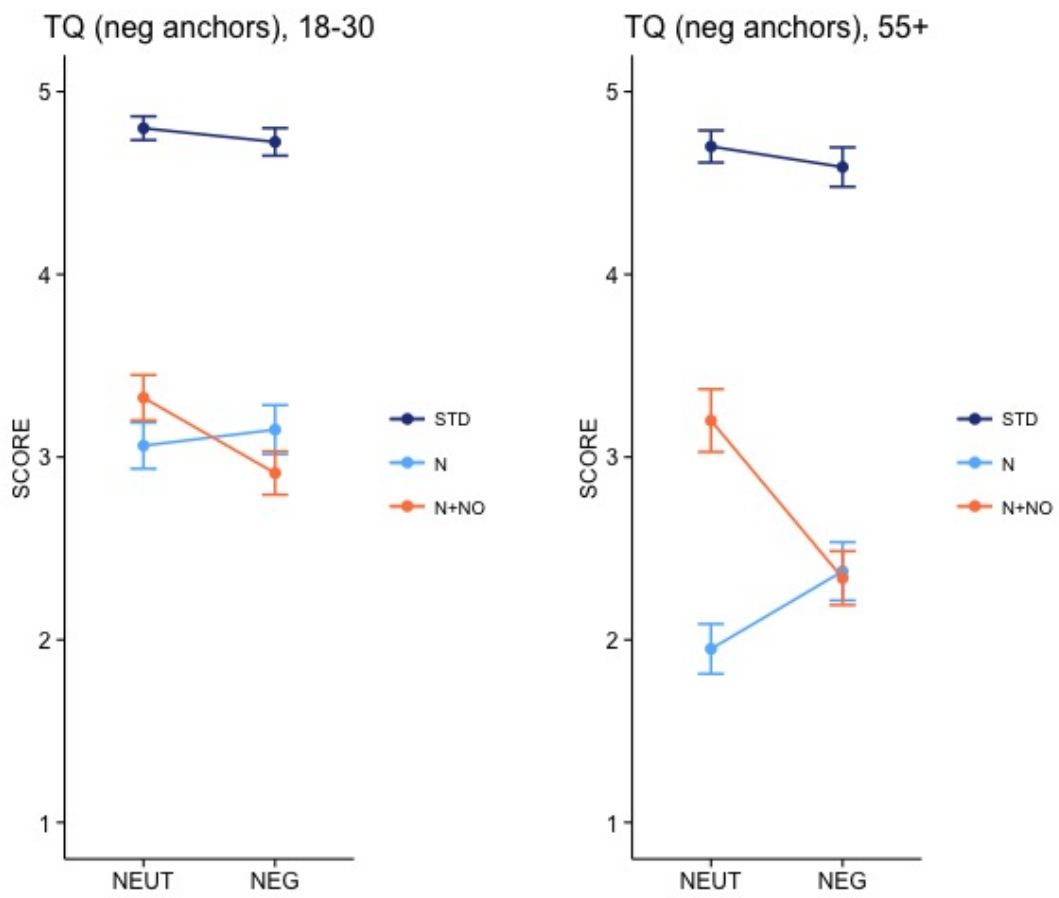


Figure 3.76: Mean ratings for standard construction VS,  $-n$ , and  $-n + no$  as tags on negative anchors in Shetland, by evidential context and age.

```

Random effects:
Groups      Name          Variance Std.Dev.
EXAMPLE    (Intercept)  0.4775  0.691
PARTICIPANT (Intercept) 1.1310  1.063
Number of groups:  EXAMPLE 48,  PARTICIPANT 20

Coefficients:
                Estimate Std. Error z value Pr(>|z|)
intINT          -3.7604    0.5750  -6.540 6.14e-11 ***
intINT_NO       -3.0963    0.5737  -5.397 6.76e-08 ***
EVIDENCENEUT    -1.1483    0.5968  -1.924 0.05434 .
AGEY            -1.7975    0.6701  -2.682 0.00731 **
intINT:EVIDENCENEUT  1.3345    0.7501   1.779 0.07522 .
intINT_NO:EVIDENCENEUT 1.9666    0.7588   2.592 0.00955 **
intINT:AGEY     -0.3164    0.5502  -0.575 0.56530
intINT_NO:AGEY  -0.2089    0.5524  -0.378 0.70532
EVIDENCENEUT:AGEY  0.9817    0.6009   1.634 0.10236
intINT:EVIDENCENEUT:AGEY -1.0856    0.7278  -1.492 0.13582
intINT_NO:EVIDENCENEUT:AGEY -0.3068    0.7382  -0.416 0.67765
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
                Estimate Std. Error z value
112  -6.7801    0.6154 -11.017
213  -5.2180    0.6008  -8.685
314  -4.0346    0.5913  -6.823
415  -2.7137    0.5809  -4.671
(2 observations deleted due to missingness)

```

Figure 3.77: Cumulative link mixed model results for tag questions on negative anchors in Glasgow. There is an effect of construction type (*-int*, *-int + no* or VS), but no further effects or interactions.

$p < .001$ ), while *-int + no* is preferred to *-int* ( $t(635.01) = -6.7555$ ,  $p < .001$ ) (Bonferroni correction applied in all three cases, significance level = .0167). This mirrors the results we saw in Shetland, although it is clearer.

Comparing the two locations, we can see that *-int + no* seems to be available in at least neutral evidential contexts for speakers in Glasgow; there was a tendency towards the same preference in Shetland with *-n + no*, but this did not come out in the statistical model. This may be due to the younger speakers; I suggest that as Shetland dialect is generally obsolescing, this feature is being lost.

In general, these *-n + no* and *-int + no* constructions were rated lower than VS and didn't break into the 4-5 mean range. Participants sometimes suggested that the situations weren't confirmational *enough* – these tags would only be preferred in a context leaning towards the positive, rather than in a context where the evidential context was neutral: for example, GY09, shown below.

- (178) It's really hard to find parking around your house; there are lots of double yellow lines everywhere. Sometimes at weekends and public holidays, it is ok, but not often. I have come round to yours and have parked outside the door. You say:  
**You cannae park there, kint you no?**



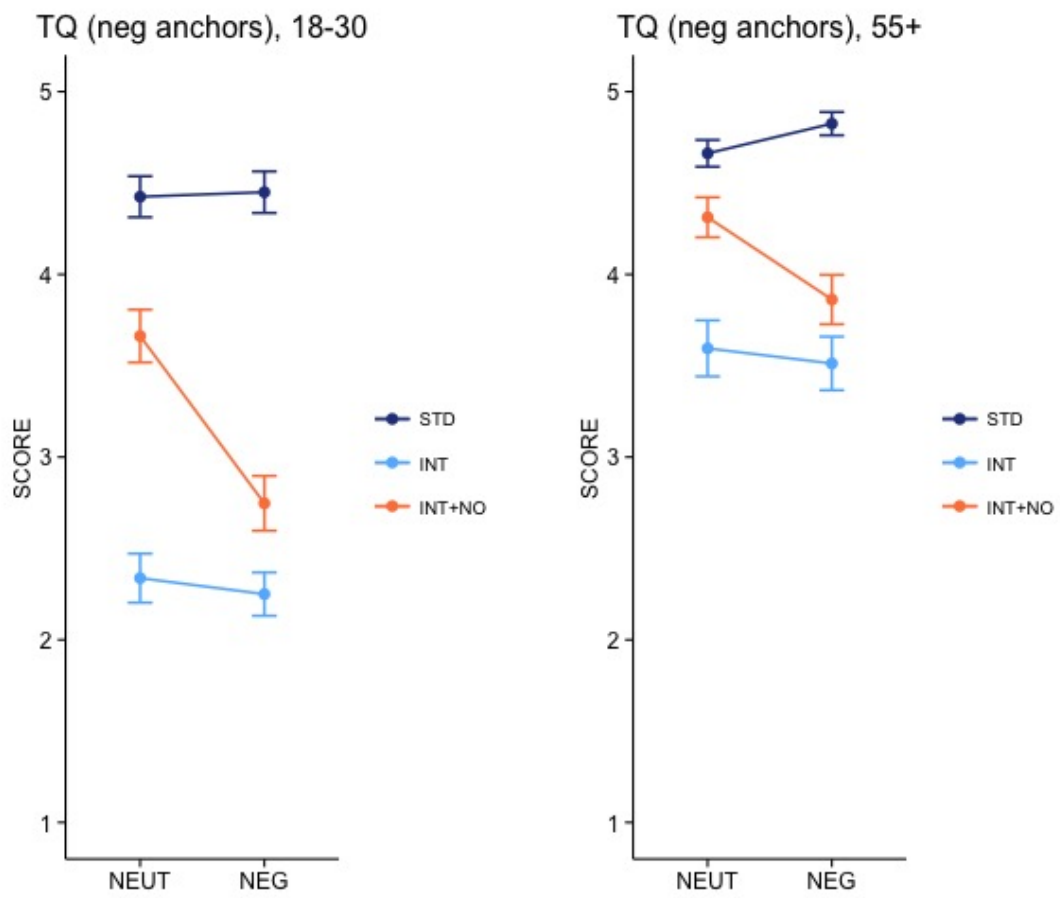


Figure 3.78: Mean ratings for standard construction VS, *-int* and *-int + no* as tags on negative anchors in Glasgow, by evidential context and age.

GY09: see like see that's- that's a perfectly valid sentence but it would only be like- in that context that you were saying it is, it's quite weird because I wouldn't say to you 'you cannae park there kint you no' if you weren't sure like  
 E: yeah yeah  
 GY09: so I would say like 'you cannae park there kint you know' is like if I was with somebody that I thought would know

This may thus have also been a factor in participants' ratings.

### 3.4 $-n + no$

Recall in chapter 2 I presented evidence from the literature and attested examples of constructions in which Shetland dialect speakers used both  $-n$  and a lower negative marker  $no$  in constructions where standard English would simply use a single negative marker.

(179) Can'n we **no** aa come in? (Shetland, Robertson and Graham 1952:10)

I also tested the acceptability of this 'double negative' construction with both Shetland participants and with Glasgow participants in the form of  $-int + no$ , where the construction has not been attested. I tested its acceptability in matrix biased questions with varying evidential contexts, in tag questions on positive anchors with varying evidential contexts, in polar rhetorical questions and in interrogative exclamatives (i.e. the relevant non-canonical question constructions). Median ratings are presented in Table 3.1.

	BQ – neut	BQ – neg	TQ – neut	TQ – neg	RQ	Excl
Shet 18-30	5	5	4	4	5	1
Shet 55+	5	5	5	4	5	4
Gla 18-30	1	1	3	1	1	1
Gla 55+	4	4	4	4	5	4

Table 3.1: Median ratings for  $-n + no$  and  $-int + no$  in all non-canonical question contexts by location and age.

Results for Glasgow are as expected, given that the construction is not attested: the median rating for the  $-int + no$  construction by 18-30 speakers in five of the six discussed contexts was 1. On the other hand, the median for 55+ speakers in five of the six discussed contexts was 4. This lines up with speakers' comments about how they were using the scale discussed in section 2.5. Combined with low-mid mean ratings (2-3), it appears that this construction isn't really acceptable for Glaswegian participants.

In Shetland, the picture is a little more confusing, and the median ratings are more mixed. For both older and younger speakers, biased questions and polar rhetorical questions with  $-n + no$  received median ratings of 5, and older speakers also gave positive tag questions in neutral contexts a median rating of 5. However, for younger speakers this tag question context had a median rating of 4; 4 was also the median rating for both groups for positive tag questions with negative evidential contexts. Despite these high medians, too, the mean ratings were generally high-mid range (around 3-4), as opposed to the Glasgow low-mid range.

Importantly, the  $-n + no$  construction is never the preferred construction for Shetland speakers and it is therefore more difficult to assess its acceptability accurately – it is always dispreferred when compared to the most preferred construction in any context. However, it seems as though it may be acceptable to some extent in biased questions, rhetorical questions and tag questions, given its attestations and moderate acceptability.

Given the somewhat inconclusive results regarding the acceptability of constructions like (179), I will not discuss  $-n + no$  results in any detail in the rest of this thesis. Intuitively, given the change we see in progress in Shetland dialect, with loss of acceptability of  $-n$  in matrix biased questions for younger speakers, the presence of this construction in the dialect may be related to the Jespersen Cycle (Jespersen 1917), with the lower *no* strengthening whatever biased question negation is being expressed by the  $-n$  marker historically. Evidence of specific pragmatic phenomena occurring regarding incoming negative markers (see e.g. Schwenter (2005) on Brazilian Portuguese *não V não* constructions and Espinal (1993) and Schwenter (2006) on *no V pas* constructions in Catalan) and outgoing negative markers (e.g. *non* in Old French (Larrivière 2010) and *en* in West Flemish (Breitbarth and Haegeman 2014)) has been attested cross-linguistically, and this may be a stage in that sort of development. However, for reasons of space and given the inconclusive results for the acceptability of this phenomenon as well as a lack of historical evidence available for Scots varieties in general, I will set this aside.

### 3.5 Conclusions

In this section, I presented results from interview method tasks carried out with Shetland dialect speakers and Glasgow Scots speakers in two age groups in order to establish the distribution of the particles  $-n$  and  $-int$  in the respective varieties.

The results of the tasks show that  $-n$  and  $-int$  appear to be restricted to

non-canonical questions, scoring poorly in declaratives, imperatives, true negative questions and negative *wh*-questions. We saw that both *-n* and *-int* are available as tag questions on positive anchors, with a preference for neutral evidential contexts over negative ones. A similar pattern was replicated for *-n + no* and *-int + no* as tags on negative anchors, where there was increased acceptability in neutral contexts for participants in Glasgow, and a tendency for this to be the case with older speakers in Shetland. We also saw that both *-n* and *-int* are acceptable in exclamatives, and in polar rhetorical questions. Perhaps most interestingly, in matrix biased questions, we saw that *-int* in Glasgow Scots was unacceptable, but that *-n* in Shetland dialect was acceptable to some extent, with perceptual hyperdialectalism in younger speakers' judgments leading to no significant difference in acceptability between older and younger speakers. I take this as evidence of change in progress, with loss of *-n* from matrix biased question contexts, while it is retained in tag questions and exclamatives.

Given the distribution that has been established in this chapter, in the next chapter, I turn to the question of how we should analyse *-int* and *-n*. In doing so, I will address the big questions posed at the beginning of the thesis: what information is taken into account when licensing a question? How is this information encoded in the semantics? And how is this information encoded in the syntax?

# Chapter 4

## Scots Data Analysis

### 4.1 Introduction

In chapter 3, I established the distribution of Shetland dialect *-n* and Glasgow Scots *-int*. I presented the results of a data collection process which showed that these particles are restricted to certain types of non-canonical questions (see Table 4.1) in each variety. Examples of the particles *-n* and *-int* are shown in examples (180) and (181).

(180) You'll be there, **wint** you?

(181) You'll be there, **will'n** you?

	Shetland <i>-n</i>		Glasgow <i>-int</i>	
	18-30	55+	18-30	55+
True Negative Q	x	x	x	x
Biased Q	?/x	?/✓	x	x
Exclamative	✓	✓	✓	✓
Polar Rhetorical Q	✓	✓	?/✓	✓
Tag Q (negative evidence)	✓	✓	✓	✓
Tag Q (neutral evidence)	✓	✓	✓	✓

Table 4.1: Availability of Shetland *-n* and Glasgow *-int* particles in various interrogative constructions in each variety. For detailed results and discussion of acceptability, see chapter 3.

In this chapter, I turn to analyse the *-int* and *-n* particles. Though on the surface they look like negative markers, and appear where there are negative markers in standard English, their distribution is extremely limited. I will first (section 4.2) look at the pragmatics of the contexts that permit these markers, showing how they can be grouped together and separated from biased questions, in order to more broadly assess what information can contribute to the licensing of a non-canonical question. I will then

(section 4.3) analyse *-int* and *-n* as CHECK moves, using Ginzburg’s (2012) interactive semantics for dialogue, and show how they are distinct from standard English, particularly tag questions. Finally, in section 4.4, I present a syntactic analysis for the particles, building on the pragmatic and semantic analyses I give, to support the idea of a conversational domain above CP in the left periphery that includes discourse particles, following Wiltschko and Heim (2016). Here, I motivate head movement to the discourse domain, and add further weight to the argument that discourse particles should be part of the syntax.

## 4.2 Pragmatics of *-n* and *-int* contexts

### 4.2.1 Introduction

The first step in analysing *-int* and *-n* is establishing the pragmatic contexts for their use. In order to do so, I will focus on speakers’ epistemic beliefs and the evidential biases surrounding the interaction, as outlined in chapter 1. The ‘belief’ and ‘bias’ terminology comes from the literature on biased questions (Sudo 2013, Domaneschi et al. 2017, Gaertner and Gyuris 2017), but I will extend it to discuss polar rhetorical questions and exclamatives too, and show how the distribution of all four non-canonical question constructions where we see some evidence of *-n* or *-int* (biased questions, tag questions, interrogative exclamatives and polar rhetorical questions<sup>34</sup>) can be accounted for in this framework, with clear similarities between the four constructions. I will also provide further evidence to support this framework that takes account of both beliefs and bias as opposed to a purely evidential account (Büring and Gunlogson 2000, Trinh 2014, Northrup 2014, Farkas and Roelofsen 2017).

I will then present evidence from three types of scenarios (predicates of personal taste; commitment revision; discourse closure) to show how tag questions, interrogative exclamatives and polar rhetorical questions can be separated out from biased questions based on their pragmatics. In this way, I will establish the relevant details of the pragmatic contexts that permit *-int* in Glasgow and *-n* in Shetland dialect<sup>35</sup>.

Throughout this section, I will also discuss evidence from standard English. I do so

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<sup>34</sup>I will discuss rhetorical questions in greater detail in chapter 6, where I will explore the relationship between polar and *wh*- rhetorical questions. I will only discuss polar rhetorical questions in this section to the extent that their relationship to the other non-canonical questions is made clear.

<sup>35</sup>Throughout this chapter, I will only discuss *-n* in Shetland dialect to the extent that it is available for all speakers; therefore, in tag questions, interrogative exclamatives and polar rhetorical questions. There was some evidence that *-n* was permitted in biased questions for older speakers in Shetland dialect (see section 3.3.1); however, I will set this aside and focus on what I take to be the end product of a linguistic change.

in order to build a case for arguing that the contexts for *-n* and *-int* are a specific subset of contexts for interrogative production where specialisation could take place. I do not argue that the standard English constructions are also specialised in this way – rather, different languages group together different parts of the belief and bias matrix<sup>36</sup>.

#### 4.2.2 The importance of evidence and belief

As outlined in chapter 1, the literature discusses two main influences on question production: the ‘epistemic belief’ of the speaker and the ‘evidential bias’ of the context (Ladd 1981, Buring and Gunlogson 2000, Romero and Han 2004, Sudo 2013, Northrup 2014, Trinh 2014, Domaneschi et al. 2017, Farkas and Roelofsen 2017, Gaertner and Gyuris 2017). In chapter 1 I set out the position that I support in this thesis – that both epistemic belief and evidential bias are important – but here I will consider the alternatives too. In particular, a number of recent accounts have taken the influence of evidential context to be the sole relevant factor (Trinh 2014, Northrup 2014, Farkas and Roelofsen 2017). In this section, I will focus my discussion on the model proposed by Northrup (2014)<sup>37</sup>, which suggests that there are very particular contexts relating to the evidence available at different time points in the discourse that license the use of different question types; these contexts do not overlap and therefore there can be no overlap in the purposes of questions. I will argue that Northrup’s key examples can be accounted for in the belief and bias model, which does not require arguing that only one question type is possible per context and thus better accounts for the data.

For Northrup (2014), question production is based on a discourse model in which interrogative forms have very specific contexts for use based on the *time* of evidence, which may be *prior* – some evidence that the speaker had access to prior to the speech time in the discourse context – or *current* – some evidence that the speaker has access to at the speech time. For example, *prior* evidence could involve having seen a poster for a talk that day at work, when the speech time is at home in the evening. On the other hand, *current* evidence, for example, could be seeing a poster for a talk and inquiring about it to a colleague at that moment.

At all times, questions are assumed to involve a commitment to  $[p \vee \neg p]$  (an

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<sup>36</sup>See Gaertner and Gyuris (2017) for a possible representation of the belief and bias space, and how different question types represent different parts of the matrix in different languages.

<sup>37</sup>For discussion of Farkas and Roelofsen’s (2017) model of tag question and rising interrogative production, see section 4.3.5. Farkas and Roelofsen posit a compositional inquisitive semantics for these constructions which involves the speaker’s interpretation of the strength of the current evidence, which accounts for the data but does not, to my mind, make strong enough predictions. I will compare this to my account in section 4.3.5.

‘openness’ commitment) – but this may be prior (i.e. the speaker had no prior belief of  $p$  or  $\neg p$  based on whatever evidence they had access to prior to the speech time) or current. Furthermore, a speaker may also have commitments to  $p$  or  $\neg p$  based on the current evidential context surrounding the interaction they are participating in, or it may be the case that they had prior evidence suggesting either  $p$  or  $\neg p$ . Northrup’s account does not permit any overlap in terms of forms used: his account therefore rules out the possibility of biased questions and tag questions occurring in the same contexts (see Table 4.2).

	prior	current
default polar question	—	$[p \vee \neg p]$
biased questions	$p$	$[p \vee \neg p]$ <b>and</b> $\neg p$
rising tag questions	—	$[p \vee \neg p]$ <b>and</b> $p$
falling tag questions	$[p \vee \neg p]$	$p$

Table 4.2: Northrup’s (2014) formulation of the prior and current evidential contexts required to produce matrix biased questions, rising tag questions and falling tag questions.

There are a number of positives to Northrup’s model – for example, that the current belief of the speaker when using a falling tag question is  $p$  rather than the openness commitment that the speaker believes an answer to the question. However, it is not clear how Northrup’s key argument (see (182)) for phrasing the distinction in terms of current and prior evidence rather than beliefs and contextual evidence really challenges the belief and bias model.

(182) *Happy hour approaches; Zabi and Kazuko need a drink. Zabi can’t easily recall where the brewery is.*

Z: Do you remember where the brewery is? Never mind; it’s on Swift, isn’t it?

(Northrup 2014:208)

Northrup argues that the openness commitment to  $[p \vee \neg p]$  is based on Zabi’s prior evidence base (signalled by the polar question at the beginning of his turn), and that Zabi also has a weak commitment to  $p$  due to his current evidential base. As there is no change in contextual evidence, Northrup argues that the sudden ability to license the falling tag question comes from the shift from a prior and current evidence base for  $[p \vee \neg p]$  to a prior base for  $[p \vee \neg p]$  and a current base for  $p$  (i.e. the speaker remembered  $p$ ). However, this can be accounted for in a belief and evidence based model: Zabi asks the polar question because he cannot remember where the brewery is, and there is no evidence to tell him that Kazuko can or cannot remember where it is. Importantly, *never mind* serves as a repair and informs Kazuko that any answer to the question she might propose ‘doesn’t matter’ or that Zabi ‘won’t care’ about any answer (Couper-Kuhlen 2004). In effect, the polar



question is cancelled; Zabi can then start again, announcing his belief of  $p$  ('the brewery is on Swift') in a neutral evidential context and using the falling nuclear tag question to indicate that Kazuko's opinion is still important and valued, but Zabi is confident in his own belief.

Furthermore, Northrup argues that matrix biased questions are used in contexts only where there is conflict between the speaker's prior belief  $p$ , and the evidence presented which thus gives a concurrent evidential base for  $[p \vee \neg p]$  and  $\neg p$ . On the other hand, falling nuclear tag questions are used when a speaker has a prior belief of  $[p \vee \neg p]$ , and a current belief of  $p$  due to the contextual evidence. Rising tag questions are used when speakers have a concurrent commitment to  $[p \vee \neg p]$  and to  $p$ , with no prior evidential context.

I believe Northrup is right to consider evidence when looking at non-canonical questions: however, there are clear examples which contradict his categorisation of the question types' licensing. For example, situations where conflict between S's belief and the evidential context are *not* present, and a matrix biased question is clearly permitted, such as when the addressee explicitly states that they cannot remember  $p$ .

(183) S and A are at a party. They spot someone arriving. S recalls that both they and A had met this person the previous weekend. S believes he is called Ash.

A: There's Rob's friend. I can't remember his name!

S: Wasn't it Ash?

It was Ash, ↗wasn't it?

#It was Ash, ↘wasn't it?

In this situation, S's epistemic belief is  $p$  – the person who has just arrived is called Ash. This is a prior belief, and not one received currently. The evidential situation surrounding the interaction is neither positive nor negative; merely entering the room cannot be seen to be evidence for or against the fact that this person is named Ash. According to Northrup's theory, then, the matrix biased question should be ruled out. However, in a situation like (183), where the addressee has specifically indicated that they can't remember  $p$  or  $\neg p$ , a matrix biased question is preferable to a falling tag question, and a tag question with a rise is also permissible. Notably:

- i) Two different constructions are permissible, arguing against the categorical nature of Northrup's model which only permits one type of question per context.

- ii) Despite the fact that the current evidential base does not include explicit evidence for  $\neg p$ , the matrix biased question is available.
- iii) It is hard to see the distinction between *prior* evidential base and *current* evidential base here; of course,  $p$  is a belief that has been established prior to the current interaction, but it is still part of the current evidential base. Note that the speaker could also reply to the addressee with a plain assertion: ‘It’s Ash.’ It is therefore hard to see how an ‘openness’ commitment to  $[p \vee \neg p]$  is required here.

This example contradicts Northrup’s (2014) claim that licensing of all matrix biased questions must involve conflict between the addressee’s prior belief state and their current evidential base. The situation in (183) provides no evidence to contradict S’s belief, and it is very difficult to see how one could be construed, particularly given A’s explicit admission that they have no evidence either way.

Instead of following an evidence-only approach to understanding the licensing of these non-canonical questions, I propose following the work of e.g. Sudo (2013), Domaneschi et al. (2017) and Gaertner and Gyuris (2017) who argue that it is the *interaction* between epistemic beliefs and evidential biases that lead speakers to produce different forms of questions. For details of how these authors envisage the relationship between the two, see chapter 1. I repeat the table of interrogative production distribution from Domaneschi et al. (2017) here for reference.

	speaker belief		
	<b>p</b>	<b>neutral</b>	<b><math>\neg p</math></b>
evidential bias	<b>p</b>	PPQ / <i>really?! PPQ</i>	<i>really?! PPQ</i>
	<b>neutral</b>	ONPQ PPQ	
	<b><math>\neg p</math></b>	ONPQ INPQ	

Table 4.3: Relationship between epistemic and evidential biases established in Domaneschi et al. (2017) for choice of matrix question produced in English and German.

Note that while there were significant preferences for certain constructions, the second most popular option per context varied in a way which suggests that there is more of a possible overlap in question production than in the model Northrup (2014) proposed (see Domaneschi et al. (2017) for full details). In particular, the cell where the speaker had no existing belief but was faced with some evidence in favour of  $p$  had no significant difference in preference between a standard PPQ and a *really?! PPQ*. This again works in favour of the belief and bias model.

As well as speaker’s epistemic beliefs and the contextual evidential bias, however, I

would also like to draw a further distinction between evidence that a speaker can surmise from the context surrounding the interaction, and evidence that directly modifies the position taken by the addressee. If a speaker has the belief  $p$ , and if the evidence surrounding the interaction is neutral or leaning in support of  $p$ , given that the addressee has access to the same evidence manifest in the context as the speaker, the speaker can reasonably assume that the addressee also shares  $p$ , such as in (184)<sup>38</sup>.

(184) S thinks that Hibs won the Scottish Cup in 2016. S and A are about to watch a programme about Scottish Cup winners. A montage of previous winners is played at the beginning of the programme, in which a number of teams featured, including Hibs. S says:

Hibs won in 2016, didn't  $\searrow$ they?

Hibs won in 2016, didn't  $\nearrow$ they?

Didn't Hibs win in 2016?

In (184), S has the belief  $p$ . The evidence is slightly positive – clearly, Hibs won the cup at some point before they were featured in the montage – but is neutral with respect to the detail e.g. in what year this happened. This evidence does not affect what S assumes about A's position; nor does it affect S's position.

If something in the speaker's evidential base external to their direct communicative interaction with the addressee suggests that  $\neg p$  is true, this does not necessarily modify how the speaker interprets the addressee's belief, and it does not mean that the speaker cannot take an egocentric perspective about  $p$ . If the speaker has previously taken the position that the addressee must share  $p$ , counterevidence that does not directly come from the addressee might at most lead the speaker to take a less egocentric approach and consider the addressee to be neutral as to whether or not  $p$  holds. In this situation, it is possible that the addressee previously had access to the counterevidence that has only just become manifest to the speaker; however it may be the case that it is also new to the addressee. Though they may very well still opt for a biased question, the speaker is asking the addressee to choose between  $p$  and  $\neg p$  for addition to Common Ground (CG) from a position where the addressee's preference for one or the other option is unknown. This can also be seen in an example with a negative evidential context, such as (185).

(185) S and A are attending a party at Leah's house. They are running very late, and expect everyone to be there already. S believes their friend, Rosie, is attending the

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<sup>38</sup>In each context, I order the possible questions from most to least likely.

party. However, on the way to the party, S and A walk past Rosie's house and see that her lights are on and her car is still outside the house. S says:

Rosie's coming to the party, isn't ↗she?

Isn't Rosie coming to the party?

Rosie's coming to the party, isn't ↘she?

In (185), S's belief of  $p$  is challenged by some contextual evidence: it looks like Rosie is at home. It is still plausible that A may also share S's belief of  $p$ , and thus may also be being challenged to the same extent by the evidence. The falling tag question is still possible, but dispreferred when compared to either a tag question with rising intonation, or a biased question, due to the negative evidential context.

On the other hand, if the addressee specifically makes a statement that undercuts the speaker's belief of  $p$ , the speaker can no longer safely assume that the addressee shares/shared a belief of  $p$ . At best, it could be that the speaker has misinterpreted the information given by the addressee, or that the addressee has offered some evidence that they consider to be compatible with  $p$ , while the speaker does not think the evidence is compatible. The speaker could thus interpret the addressee's belief as somewhat neutral. At worst, it may in fact be that the addressee believes  $\neg p$ , and that this is what they are telling the speaker by undercutting the speaker's previous assumption. The speaker must then clear up the conflict of beliefs. For example, take (186).

(186) S and A are organising a retirement party for their colleague, Oluseun. S believes that A will have bought a present for Oluseun, based on the delegation of tasks they previously carried out. However, on the way up the stairs to the party, S mentions the present and A says 'what present?'. S says:

You bought the present, didn't ↗you?

Didn't you buy the present?

# You bought the present, didn't ↘you?

In (186), S has the belief  $p$  – 'A is buying a present for Oluseun'. The discourse-external evidence is neutral; however, S can no longer assume that A shares their belief of  $p$ .

While it may at first seem like evidence that comes directly from the addressee is simply stronger negative contextual evidence, below I will argue that the speaker's interpretation of the addressee's belief *can* have independent effects on the choice of

discourse move, separate to the discourse-external evidence. I do not believe that this interpretation of addressee belief is semantically encoded in standard English, but argue that it affects the pragmatic licensing of the various constructions in standard English and the *contingency* required in the construction (Gunlogson 2008, see also section 4.3). This specific set of conditions allowed the Scots *-n* and *-int* particles to specialise around this particular point and to establish a meaning built on this idea of shared belief.

Having defined the parameters of ‘evidence’ and how dependent on the speaker and their interpretation this is, in the next section I discuss the common factors that bring together the constructions that permit *-n* and *-int* in their respective varieties, to suggest how they have become or are becoming specialised.

### 4.2.3 *-n* and *-int*: common factors

For all of the constructions with interrogative syntax I will discuss here, the speaker holds an epistemic belief of *p*. This distinguishes them from ‘true’ interrogatives, whether negative or positive, where the speaker has no prior belief and thus the question is truly information-seeking. This, however, does not allow us to distinguish the contexts in which *-n* and *-int* continue to be available from biased questions, which do not permit *-int* in Glasgow and appear to be losing *-n* in Shetland. In order to do so, we need to look more closely at the evidential contexts, the role of addressee beliefs, and possible follow-up moves, for all four constructions. I will focus on the distinction between biased questions and tag questions, but I will refer to exclamatives and rhetorical questions where necessary in order to demonstrate that the criteria I refer to are relevant for all the *-n* and *-int* constructions.

#### Non-challenging evidence

The two evidential contexts that are discussed with regards to biased questions and tag questions in the literature are neutral and negative evidential contexts. It is worth therefore investigating whether either of these contexts is particularly more relevant than the other for licensing *-n* and *-int*.

One of the results that comes out from the data presented in chapter 3 is that *-n* and *-int* in tag questions are preferred in evidential contexts where there is no evidence challenging the speaker’s belief of *p* over contexts where there is counterevidence (see section 3.3.3).

Interestingly, too, although *-n* appears to be being lost from biased questions in

Shetland dialect, we see that in contexts where  $-n$  is potentially confounded with the standard English  $-n't$  (e.g. *did'n*), these  $-n$  constructions are significantly preferred in neutral evidential contexts over ones with negative counterevidence. This suggests that again, neutral/non-challenging evidential contexts are preferred for  $-n$ . However, of course, we also seem to see ongoing loss of  $-n$  from biased questions (and a lack of availability for  $-int$  in biased questions at all in Glasgow Scots), suggesting that there is a stronger preference for tag questions in neutral evidential contexts than biased questions given that the particles can seemingly specialise to prefer neutral evidential contexts but only be retained in tag questions<sup>39</sup>.

Although not discussed in terms of beliefs and biases in the literature, it is also possible to frame exclamatives and polar rhetorical questions in terms of their evidential contexts too. Exclamatives are taken to be factive and thus there cannot be any challenge to this factivity in the immediate environment in which they are produced. Polar rhetorical questions are perhaps more complex (see chapter 6) but fundamentally are assumed to be in CG in a way such that ‘reasserting’ them (Ginzburg 2012) is taken to be ‘obvious’ to the addressee – it is not the case that it is a question that requires resolving due to some challenging evidence. Therefore, we can conclude that the constructions that permit  $-n$  and  $-int$  are available in contexts where there is no contextual evidence challenging the speaker’s belief of  $p$ .

Despite the fact that the three constructions which permit  $-n$  and  $-int$  in both Shetland and Glasgow are related to neutral or positive evidential contexts, this is once again not enough to distinguish the constructions from biased questions, which are also available in non-challenging evidential contexts (as we saw in examples like (183) and (184)). I believe that looking at possibilities for attribution of the speaker’s belief to the addressee is a key difference, which I will explore with regard to predicates of personal taste in the next section.

### **Predicates of personal taste**

Predicates of personal taste offer a good context in which to separate out the influence of evidential context and the ability for the speaker to attribute the belief to the addressee. As Malamud and Stephenson (2014:2) state, predicates of personal taste allow us to distinguish speaker and addressee beliefs and discourse commitments: if S is talking to A, and states that ‘L is attractive’, S typically means that *they* find L attractive, without passing any

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<sup>39</sup>See chapter 5 for an experimental exploration of this prediction in standard English.

judgment on whether other conversation participants find L attractive. S is taken to be the *judge* for the predicate (Lasersohn 2005). Pearson (2013) notes that there is a speaker-hearer shift when a predicate of personal taste is used in a (positive polar) question: ‘Is this cocktail nice?’ opens the floor for the addressee to take on the role as the judge without offering any judgment on the speaker’s behalf. This idea is also expressed by Tenny’s (2006) ‘interrogative flip’, where the seat of knowledge flips from speaker to addressee in a question context.

Malamud and Stephenson (2014) discuss the role of predicates of personal taste with regard to reverse polarity tags with rising intonation, same-polarity tags, and rising declaratives in three specific contexts, which they refer to as ‘blushing/innuendo’, ‘seeking agreement’ and ‘unsure of move’. Malamud and Stephenson’s insight into ‘seeking agreement’ situations are relevant here – they suggest that by virtue of being licensed in a context like (187), reverse polarity tags involve the speaker and the addressee individually acting as judges, and committing to *p*.

(187) A and B are discussing various traits of their mutual acquaintances. B says ‘I think Bill, more than anything else, is just a really nice guy’. A replies:

(But) he’s attractive too, isn’t ↗he? (Malamud and Stephenson 2014:3)

Malamud and Stephenson argue that a construction like (187) involves a projected commitment to *p* from the speaker (e.g. they will only commit based on A’s response), plus a projected addition to the CG (e.g. A’s response will support the addition of *p* to CG). I will discuss their semantic analysis in section 4.3.5. For the moment, we can extend Malamud and Stephenson’s discussion of predicates of personal taste and examine how nuclear tags with falling intonation behave as compared to matrix biased questions (as well as exclamatives and polar rhetorical questions). Consider examples (188) and (189) – the contexts are identical except for the fact that in (189), A makes a move to rent the movie that they do not in (188).

(188) S believes that horror films are too scary for 12-year olds to watch. S and A are going to be babysitting A’s cousin, Mariya, who is 12. Mariya asks them to rent a particular film because her friends watched it and liked it. It is a horror film. At the video shop, S and A see the film on a shelf. S says to A:

It’s too scary for her, isn’t ↘it?

?It’s too scary for her, isn’t ↗it?

# Isn't it too scary for her?

(189) S believes that horror films are too scary for 12-year olds to watch. S and A are going to be babysitting A's cousin, Mariya, who is 12. Mariya asks them to rent a particular film because her friends watched it and liked it. It is a horror film. At the video shop, A picks up the film Maryia asked for. S says to A:

Isn't it too scary for her?

It's too scary for her, isn't /it?

#It's too scary for her, isn't \it?

In both examples (188) and (189), S holds the belief  $p$  – 'horror films are too scary for a 12-year old'. 12-year-old Mariya wants to watch a horror film. There is some negative evidence challenging S's belief about the film's suitability – Mariya's friends have reportedly watched and enjoyed this film. Despite this consistent evidence, though, it is the opinion of the addressee that matters for the production of the falling tag question.

In (188), S is able to make the assumption that A shares their belief because they have not been explicitly told otherwise. In this context, the falling nuclear tag question is the preferred option; the rising tag question would be marked but not unacceptable, while the matrix biased question is strange in this context.

In (189), S's belief about the (subjective) truth of  $p$  has not changed; neither has the discourse-external evidence that this film is a horror film and therefore too scary for Mariya. What has changed is S's ability to attribute this belief state to A: when A picks up the movie, they indicate that they are considering renting it. The falling nuclear tag question is thus ruled out, and the matrix biased question or rising tag becomes the preferred option. It seems, therefore, that matrix biased question and rising tags can be used when there is uncertainty regarding A's beliefs, while a falling tag question cannot. This contrasts with examples like (184) and (185) where although there is neutral and negative evidence respectively, and intuitively there are preferred constructions in each context, none of the options are *bad*. That does not appear to be the case in these examples that lack the potential for addressee attribution.

Further examples show the same pattern.

(190) S and A's friend Christian has made a cake. Christian is usually a good baker. S, A and another friend, Paula, each take a slice. S takes a bite, and thinks the cake is delicious. Paula has also taken a bite, and looks very happy. A has also taken a bite, but has not indicated their feelings about the cake. S says to A:



It's good, isn't \it?

?It's good, isn't /it?

#Isn't it good?<sup>40</sup>

S believes that the cake is delicious, and the external evidence (Paula's agreement) backs this up. By producing a falling tag question, S is making a statement about their own belief (in the anchor), but is making an assumption about the addressee's belief too.

Now, consider context (191).

(191) S and A's friend Christian has made a cake. Christian is usually a good baker. S, A and another friend, Paula, each take a slice. S takes a bite, and thinks the cake is delicious. Paula has also taken a bite, and looks very happy. A has also taken a bite, but screws up their face. S says to A:

Isn't it good?

It's good, isn't /it?

#The cake is delicious, isn't \it?

In context (191), S's belief about the (subjective) truth of *p* (the cake is delicious) has not changed; neither has the evidence supporting this belief. What has changed is that they no longer feel justified in also attributing *p* to the addressee. In cases where the speaker is no longer able to attribute to the addressee, tag questions with falling intonation are dispreferred; instead, rising intonation tags or matrix biased questions are preferred.

This ability to attribute is also important for the production of interrogative exclamatives with *-n't*. As discussed above, the speaker must be willing to take responsibility for *p*, and the discourse-external evidence must also support *p* – furthermore, the speaker must be able to attribute *p* to the addressee. When there is no possible way that the addressee can believe *p* due to a lack of manifest evidence, an *-n't* exclamative should not be possible. For example, consider context (192).

(192) S is on the phone to A, and is telling A about their new cat. S just picked up the cat that day. S says:

#Isn't it cute!

The exclamative in (192) is infelicitous because S cannot possibly know that A shares their belief of *p* ('the cat is cute') if A does not have access to the evidence (i.e. the

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<sup>40</sup>With exclamative intonation, this would be ok.

ability to look at the cat, and to see that it is cute) – no matter how strongly positive the evidence is. Compare with (193):

(193) S is on holiday. They are on the phone to A, and are telling A about the town they are staying in. S knows A stayed in the same town on holiday last year. S says:

Isn't it beautiful!

Although A does not have direct access to the same *current* evidence that is currently manifest to S (indeed, things may have changed in the town, S and A may have stayed in different areas of the town etc), S assumes A will be willing to also take responsibility for *p* in CG, given that they have access to *some* relevant evidence. It is thus felicitous for S to produce the exclamation.

Note that this directly contradicts Taniguchi's (2017) argument that exclamatives are purely about speaker commitment, with no input from the addressee. While I believe Taniguchi is correct for positive inversion exclamatives (*boy, is that spicy!*), the evidence from examples (192) and (193) suggests that standard English negative inversion exclamatives *are* centered around the speaker/addressee relationship. This can also be seen with the contrasting acceptability of *in my humble opinion*, a parenthetical that implies the speaker is not willing to change their opinion (Beyssade and Marandin 2006a) – e.g. that they are happy to take responsibility for *p* by themselves. *In my humble opinion* is acceptable preceding positive inversion exclamatives, but not negative inversion exclamatives, presenting further evidence that while positive inversion exclamatives may involve speaker-only commitment, negative inversion exclamatives require some connection with the addressee.

(194) In my humble opinion, boy, was it delicious!

(195) #In my humble opinion, wasn't it delicious!

With regards to polar rhetorical questions, see chapter 6, where I discuss them in more detail. I believe that the line between polar rhetorical questions and exclamatives is a difficult one to draw: however, it seems that scalarity plays an important role. Zanuttini and Portner (2003), for example, argue that scalarity is the other important factor in establishing what exclamatives are, alongside factivity. There is no such requirement on rhetorical questions – I thus follow the literature in stating that polar rhetorical questions and exclamatives are in effect the same construction (Zanuttini and Portner 2003, Delfitto and Fiorin 2014); however, I suggest that when the relevant predicate is scalar, it is an

exclamative. When it is not scalar, the move is a rhetorical question. Predicates of personal taste are gradable (Kennedy and McNally 2005, Kennedy 2007) and are thus not available to be in polar rhetorical questions – they therefore cannot be discussed at this point.

In summary, there appear to be differences in the availability of non-canonical question constructions depending on whether the speaker believes they can also attribute a belief of  $p$  to the addressee, separate to the non-challenging nature of the evidential context. The evidence from predicates of personal taste presented here separates exclamatives and falling nuclear tag questions from rising tag questions and biased questions, which are dispreferred in these situations.

However, although it is the case that the constructions which permit  $-n$  and  $-int$  appear to be addressee-directed in that they require the possible attribution of the speaker's belief to the addressee in order to be produced, it is not the case that the acceptance of  $p$  to CG is dependent on the addressee's acceptance or confirmation. I will now discuss what I label *commitment revision* in order to investigate the relationship between the beliefs of the speaker and the addressee.

### **Commitment revision**

I use the term *commitment revision* to refer to a situation where an addressee expresses an explicit inability to take responsibility for  $p$ ; in other words, a case where the addressee indicates that they can only be a *dependent* source for the proposition, and do not have their own independent reason to commit to  $p$  (Gunlogson 2003). These situations can be clearly seen where the speaker utters some sort of question or tag, and the addressee responds with 'I don't know'. When an addressee responds to a speaker's question or tag with 'I don't know', they explicitly state that they are unable to take any responsibility for  $p$  at this point. In all three constructions where  $-n$  and  $-int$  are available, if the addressee responds with 'I don't know', the speaker can in effect revise their commitment to a straightforward assertion of  $p$ . This suggests that these constructions do not have to have full question semantics or to take  $\neg p$  into account (although they might).

Firstly, canonical tags with falling intonation. If the speaker produces a canonical tag with falling intonation, and the addressee responds with 'I don't know', it is perfectly valid for the speaker to then *revise their commitment* and take full responsibility for  $p$ 's addition to CG. This is true regardless of evidential context (although falling tags are more common in neutral contexts (Ladd 1981)), suggesting that when a speaker produces this construction, they do not need the addressee to provide any sort of answer in order for the

proposition to be added to CG and downdated from the Table/QUD stack.

(196) S: He can come, can't \he?

A: I don't know.

S: Well, he can.

Examples of this can be seen in the British National Corpus (197), where following an assertion with a tag question, an addressee indicates they do not know the answer, and the speaker re-states the assertion *without* the tag, thus taking full responsibility for  $p$ <sup>41</sup>.

(197) Paul: Wendy's just got Sky, hasn't she?

Shelia: Eh?

Paul: Wendy's got Sky in today. I went round. I got the lecture.

Moving on to consider canonical tags with rising intonation, the same *commitment revision* possibilities are not available – indicating that in these cases, the speaker is not able to be an independent source for the commitment and requires some active confirmation from the addressee. Of course, canonical tags with rising intonation are preferred in situations where there is some evidence challenging the speaker's existing belief – it thus makes sense that the move would require more active participation from the addressee. The commitment revision possibilities for the two types of canonical tags could therefore perhaps be seen to be a function of the evidential contexts they are available in, rather than the semantic meaning of the construction.

(198) S: He can come, can't /he?

A: I don't know.

S: #Well, he can.

I thought he could.

On the other hand, matrix biased questions suggest that commitment revision is not simply a function of the evidential context. Regardless of whether the evidential context is neutral or negative, if an addressee responds to the speaker's biased question with 'I don't know', it is not possible for the speaker to revise their levels of commitment and take full responsibility for the proposition in CG as an independent source. In a negative evidential

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<sup>41</sup>Although I do not have access to the intonation of this example, Dehé and Braun (2013) find in their corpus study of the International Corpus of English that 84.8% (N=196) of the negative tags on positive anchors have falling intonation; it is therefore most likely that this is a falling tag. The context, as well, does not give any negative counterevidence challenging Paul's belief that 'Wendy's just got Sky' and thus we would expect this to be a falling tag (Ladd 1981).

context, such as (199), the speaker's position has clearly been challenged and they can no longer take responsibility for the proposition. At most, they could claim that they *thought* *p* was correct, based on their previous epistemic state, but they cannot be an independent source.

(199) S thinks their friend Denyse will be coming to the party tonight. However, S then notices on Facebook that Denyse has clicked attending on a different event that is taking place at the same time.

S: Isn't she coming?

A: I don't know.

S: #Well, she is.

#I think she is.

I thought she was.

In a neutral evidential context, one might assume that when there is no information challenging the speaker's belief, in the event that the addressee could not take on an independent commitment (as in (200)), the speaker could revise their commitment and take full responsibility for the proposition in CG. However, it is clear that that is not the case. While it would be possible for the speaker to say that they currently *think* Darryl bought a ticket, it would not be felicitous for them to entirely revise to no longer require an independent commitment from the addressee.

(200) S has got some spare tickets to a concert. S thinks their friend Darryl already has a ticket but wants to check this information with A in case Darryl is still looking for one.

S: I thought about giving the ticket to Darryl, but didn't he get a ticket the other day?

A: I don't know.

S: # Well, he did.

I think he did.

I thought he did.

While this may be related to the idea of *credence* (or strength) in belief as put forward by Farkas and Roelofsen (2017) – perhaps it is the case that in both of these situations, the speaker's credence of belief is not high enough to take sole responsibility, and that biased questions are only available in a [low, moderate] credence context – note that the impossibility of commitment revision also holds to some extent for examples where

the addressee has strong credence of belief, such as the friend-of-a-friend's name situation presented in example (183) and repeated here, with an extended response.

(201) S and A are at a party. They spot someone arriving. S recalls that both they and A had met this person the previous weekend. S believes he is called Ash.

A: There's Rob's friend! I can't remember his name.

S: Wasn't it Ash?

A: ?I (really) don't know<sup>42</sup>.

S: ?Well, it was.

I think it was.

In example (201), the addressee has opened the interaction by stating that they are not able to be an independent source. Despite having high credence in the proposition, the speaker then uses a biased question; if commitment revision was based purely on credence in the belief, we would expect that this would be a perfectly acceptable situation in which a speaker could then revise their commitment. However, this is a marked option. The Table/QUD has not been cleared; the speaker has to in effect retract the biased question from the QUD and put forward a proposition instead. The speaker has given the addressee the opportunity to make a commitment, which they have felt unable to take; it is thus better for the speaker to hedge in their subsequent response<sup>43</sup>.

Unlike biased questions but like falling intonation tag questions, exclamatives and polar rhetorical questions permit commitment revision.

(202) S: That cake! Wasn't it good!

A: I don't know.

S: Well, it was.

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<sup>42</sup>Note that it is perhaps marked for A to respond to S in this situation with 'I don't know'. A put the information on the Table/QUD that they could not remember the name of the friend, and S followed up with the biased question, which seems to indicate that S cannot proceed unless the addressee is also willing to be a source for the commitment. Given that when there is an active MaxQUD which has not yet been downdated and which was initiated by A, some form of *question elaboration* (Asher and Lascarides 2003) or *influence/dependence* relation (Ginzburg 2012) should hold.

'If Q-Elab( $a, b$ ) holds between an utterance  $a$  uttered by A, where  $g$  is a goal associated by convention with utterances of the type  $a$ , and the question  $b$  uttered by B, then any answer to  $b$  must elaborate a plan to achieve  $g$ .' (Asher and Lascarides 2003)

Given this principle, the question posed by S should be aimed at achieving the goal  $g$  of the original utterance. For A to then repeat their original position would suggest that S's move did not move towards a resolution of  $g$ , breaking the Q-Elab principle. However, if A really insists, perhaps with something like *really*, it is possible for S to revise to something like *I think it was*, but marked to simply say *it was*, as discussed above.

<sup>43</sup>It may also have lowered the speaker's credence in their belief of  $p$ .

(203) A was very confident that they would be able to win a prize in a photography competition they entered. In particular, they believed their entry for the last category was in with a very good chance. However, they have lost all of the earlier categories and are behaving in a very dejected manner.

S: Cheer up! Can't you still win the last one?

A: I don't know.

S: Well, you can.

Well, I think you can.

As with the tag questions with falling intonation, if the addressee explicitly says that they cannot commit to  $p$ , it is possible for the speaker to take full responsibility for the proposition and present it again to the addressee, this time as an assertion for their acceptance.

In summary, commitment revision is permitted following falling tag questions, exclamatives and rhetorical questions. This possibility does not seem to be purely to do with the strength of or credence of the speaker's belief of  $p$ , as it is not possible in biased questions even when there is no challenging evidence. The relation between the speaker and addressee is therefore relevant to the licensing of these constructions, but if the speaker's assumption that the addressee is also able to take responsibility for the proposition turns out to be incorrect, the discourse can still proceed.

Finally, I will discuss what I term 'discourse closure': what sort of follow-up moves are permitted after the relevant constructions. In particular, I will focus on the possibility of a following *so*.

### **Discourse closure**

There has been considerable discussion about what is required to accept something into CG. According to e.g. Farkas and Bruce (2010), Northrup (2014) and Malamud and Stephenson (2014), addition to CG can come about in one of two ways. A proposition can be added directly into CG by being overtly accepted by the discourse participants. Alternatively, a proposition that is not objected to by a discourse participant is automatically added into that participant's discourse commitments. A proposition that is then in the discourse commitments of all conversational participants is automatically in the CG between those participants. On the other hand, Ginzburg (2012) is more cautious and supports an approach where active acceptance is required (verbally or perhaps gesturally), not just a lack of dissent. Looking at the ways the propositions from the

three constructions that permit *-n* and *-int* can be accepted into CG can shed further light on the differences between these constructions and biased questions, despite the similarities between them.

Intuitively, tag questions with falling intonation do not require a response from the addressee in the way that a true question or a tag question with rising intonation does. It should be noted that ‘yeah’ or ‘mm’ responses to tag questions appear to be very common in the British National Corpus, but there are a number of instances where the discussion moves on without any explicit (verbal) acknowledgement. Generally, the discussion remains on the same topic, but without explicit acknowledgment of the original assertion. In (204), Jessie adds extra information to the characterisation in the assertion without explicitly acknowledging it. In (205), the group laughs and then moves on without any explicit acknowledgment of the assertion that ‘Kevin was right’. In (206), Evelyn uses two tags to which Arthur does not explicitly respond. Eventually, Evelyn moves the conversation on to birds using a polar question, which Arthur then responds to. In (207), Carole does not explicitly acknowledge Pat’s assertion that Amy has had a long night.

(204) Harry: He was always very particular about his ives- knives, wasn’t he?

Jessie: And very clean.

Harry: Yeah.

(205) Karen: We need, we’ve only got one more.

Ruth: Yeah, well, Kevin was right then, wasn’t he?

[group laughs]

Paul: Got five left.

(206) Evelyn: Well I know what’s on there, it won’t be the same, its not, it won’t be the same songs or items, will it?, they don’t repeat their repertoire, their there not different items [pause] I mean if we did and it was [pause] a repeat you could always wipe it out, put something on top, couldn’t you? [pause] Have all the birds gone?

Arthur: They went a little while ago, apart from that they never came on this end.

(207) Carole: Yes ooh dear excuse me [pause] early night tonight [pause] Amy permitting.

Pat: Mm [pause] well she’s certainly got a [pause] had a long evening innings, hasn’t she?



Carole: Well hopefully she'll be in reasonable mood when she wakes up [laugh]

The speaker believes that the addressee already shares the belief  $p$ , and so the addressee does not need to take any responsibility for  $p$ , or respond. It seems the addressee can choose to acknowledge  $p$  overtly, as they would with an assertion, but there is no 'conversational crisis' if  $p$  is not directly acknowledged.

Adding *so* to a second following proposition highlights this distinction. *So* is used to mark an inference between propositions (Blakemore 2002) and is used in 'recipient-orientated' contexts (Bolden 2009) – possibly indicating a desire for the addressee to take a turn in the conversation. Observing the acceptability of this additional *so* on a following proposition, we can see differences with regard to the behaviour of nuclear tag questions, confirmational particles and post-nuclear tag questions. I will also consider how *so* relates to matrix biased questions, exclamatives and polar rhetorical questions.

Firstly, falling nuclear tag questions. Consider the examples in (208) and (209). In both cases, the speaker uses a tag with falling intonation, indicating that they are willing to take full responsibility for the proposition in CG, but simply wish to open the lines of communication for the addressee if they wish to make a comment.

(208) It's a beautiful day, isn't it? (?So) we should go to the beach!

(209) David drinks white wine, doesn't he? (?So) I'll buy some for the party.

In both cases, the speaker is happy to take responsibility for the proposition, or believes that it is already in CG between themselves and the addressee. There is no requirement for the addressee to provide confirmation, or in fact any response unless they wish to explicitly reject  $p$ <sup>44</sup>. The speaker can simply move on to the second proposition, e.g. 'we should go to the beach'. Although this second proposition seems to be in some way linked to the first, to add an inferential *so* link is unnecessary, and in fact marked. If we consider the function of *so* to encourage turn-taking that incorporates the two related propositions, there does not seem to be any need to hold over the first proposition when moving on to the second when a falling nuclear tag is used. In situations like those in (208) and (209), the discourse can proceed following the second proposition with the addressee responding directly to the second proposition, with the first already confirmed in CG.

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<sup>44</sup>Of course, the addressee can respond e.g. with *yes*, *yeah*, *mmm*, a nod etc., as they could to an assertion without a nuclear tag.

Matrix biased questions do not request confirmation, but rather seek an answer (as seen above in the *commitment revision* examples). Even in a neutral evidential context, a following *so* proposition is marked (see example (210)). However, it seems that in fact, without an explicit addressee response (an answer, a nod etc), any following proposition is somewhat marked regardless of whether or not it has *so*.

(210) Doesn't David drink white wine? ?So I'll get some for the party.

This makes sense if we consider that the second proposition requires that the proposition contained in the matrix biased question ('David drinks white wine') is true and in CG. However, as it is semantically a question, *p* must be dealt with in the QUD before the discourse can proceed.

It is also worth discussing the discourse continuation possibilities for exclamatives and polar rhetorical questions. For both constructions, *so* is marked following the construction; without *so*, they are felicitous.

(211) Isn't it a lovely day! (?So) let's go to the beach!

(212) Didn't I tell you it would be fine?! (?So) let's celebrate.

Interestingly, however, there are situations with rising nuclear tags where a *so* linking to a following proposition does not seem to be marked – though note, that it is not that *so* is obligatory here. It is simply not marked.

(213) It's a beautiful day, isn't ↗it? (So) we should go to the beach!

(214) David drinks white wine, doesn't ↗he? (So) I'll buy some for the party.

In examples (213) and (214), the tag expects more of a response from the addressee than the falling tags in examples (208) and (209). They appear to be requesting explicit confirmation of *p* from the addressee, rather than checking CG presence. If the addressee has not provided any overt response to the first proposition, the speaker can add *so* to the second proposition, indicating that something, namely the second proposition, is dependent on the addressee's confirmation of the first proposition and therefore a response is required.

Note that the addressee does not have to overtly confirm the first proposition – by virtue of responding to the second proposition, they are able to confirm the first. In a canonical falling nuclear tag question, speakers have accepted the first proposition by virtue of not rejecting or challenging it, and so the second proposition is treated independently.

#### 4.2.4 Summary

We saw in chapter 3 that *-n* and *-int* had a limited distribution, restricted to tag questions in non-challenging evidential contexts, interrogative exclamatives and polar rhetorical questions, with apparent loss from matrix biased questions. In this section I have discussed firstly how all four of these non-canonical question types can be considered within the same framework of speaker beliefs and evidential biases, and how a combination of the two factors is important for licensing the questions. I then presented evidence from the pragmatic distribution of falling tag questions, interrogative exclamatives and polar rhetorical questions in standard English, which showed that despite some overlap in the licensing contexts of these three constructions with rising tag questions and matrix biased questions, there are ways that they can be separated and grouped together. Firstly, I discussed that in the tag questions, exclamatives and polar rhetorical questions, it is the case that the speaker feels that they can attribute their belief to the addressee; using predicates of personal taste I showed how this possibility for addressee attribution is not just a case of strong discourse-external evidence, but can operate separately and affect the possibility of licensing particular construction types. Secondly, I discussed the ability of a speaker to revise their level of commitment to *p* and take full responsibility for *p* in CG if the addressee was unable to commit. Finally, I discussed discourse closure and the possibilities of follow-up moves for all constructions. Having established the pragmatic distribution of the particles, the first step in answering the question of what they are, I will move on to develop the semantics of *-n* and *-int*, taking all of this as evidence in that discussion. Importantly, I do not argue that the standard English constructions and the negative markers in them have specialised; they are interrogative constructions that happen to have this pragmatic distribution.

### 4.3 A semantic analysis for *-n* and *-int*

#### 4.3.1 Introduction

Taking the pragmatic evidence established in section 4.2 above, in this section I will propose a semantic analysis for the *-int* and *-n* particles, firstly arguing that they are not instances of biased question negation (Romero and Han 2004, Krifka 2015, Romero 2015). Instead, I will develop an analysis of the particle as CHECK moves, using the framework for dialogue established in Ginzburg (2012). The term ‘check’ has been widely used in the literature – I will define this more specifically for the Scots particles, before putting forward an analysis

of standard English tag questions which draws on Reese and Asher (2006) and Gunlogson (2008) and shows where the two constructions differ. I will round off this section with a comparison of my tag question analysis to two recent accounts: Farkas and Roelofsen (2017) and Malamud and Stephenson (2014), showing how the analysis presented here accounts for the data better.

Although the CHECK move can also be used in contexts where standard English would use exclamatives or polar rhetorical questions, I will mostly set aside detailed comparison with the semantics of these standard English constructions in this chapter. For discussion of rhetorical questions, see chapter 6. I will refer to exclamatives where necessary in this chapter.

### 4.3.2 $\neg$ a negative question

It is immediately apparent from their distribution that *-int* and *-n* cannot be standard negation markers. From their distribution, we can see that speakers do not accept either particle in truly negative questions, nor in negative assertions or imperatives – two other contexts where negation is generally used. Instead, we can consider whether an analysis of biased question specific ‘negation’ is appropriate. I argued against the analyses of van Rooij and Šafářová (2003) and Krifka (2015) in chapter 1. The alternative is a  $\neg$ VERUM or a FALSUM analysis, which I consider now.

Perhaps the most influential analysis of biased questions is that of Romero and Han (2004). Romero and Han posit an analysis of biased questions with ‘high’ negation in which the negation marker is indeed negation, but scopes high over a VERUM operator (Höhle 1992), also introduced by the negation. VERUM is a conversational epistemic operator which indicates a high degree of belief in the proposition. While VERUM is not lexically realised in biased questions, it can be realised in assertions through focus intonation, as in (215), or epistemic adverb *really*, as in (216).

(215) S: Peter claims Kimiko went to the Himalayas.

A: She DID go to the Himalayas.

(216) Sandra really is clever.

Romero and Han (2004) define the VERUM operator as expressing that the speaker is ‘certain that  $p$  should be added to the Common Ground’. The formal definition they give is shown in (217), and states that for every world  $w'$  in the set of worlds that is compatible with  $x$ 's knowledge in  $w$  ( $\text{Epi}_x(w)$ ), then for every world  $w''$  in the set of worlds where  $x$ 's

conversational goals in  $w'$  are fulfilled ( $\text{Conv}_x(w)$ ),  $p$  is part of the Common Ground in  $w'$ . They shorten this definition to FOR-SURE-CG $_x$ .

$$(217) \llbracket \text{VERUM} \rrbracket = \lambda p_{\langle s, t \rangle} \lambda w. \forall w' \in \text{Epi}_x(w) [\forall w'' \in \text{Conv}_x(w') [p \in \text{CG}_{w''}]]$$

(Romero and Han 2004:627)

In order to get the definition of biased questions, then, the negation raises and scopes a) under the Q operator but b) above the VERUM operator.

(218) Isn't Jane coming too?

LF: [<sub>CP</sub> Q not [ VERUM [<sub>IP</sub> Jane is coming too]]]

This then gives the Hamblin/Karttunen question partition  $\{\text{FOR-SURE-CG}_x p, \neg\text{FOR-SURE-CG}_x p\}$ , asking whether the speaker is correct in assuming that  $p$  should be added to CG or whether the addressee can provide any information that contradicts this assumption.

Romero and Han's (2004) analysis has been widely cited; however, Romero (2006) and AnderBois (2011) point out various issues with the account. Firstly, what it would mean to answer a question where what is being questioned is the negation of FOR-SURE-CG $_x$  does not align with what it actually means to answer a biased question (Romero 2006). To answer 'yes' to a  $\neg\text{VERUM}$  question would mean that the addressee was sure that  $p$  should be added to CG; however, a 'no' response would only indicate uncertainty about adding  $p$  to CG. In actual fact, a 'no' response to a biased question indicates endorsement of  $\neg p$  as well as uncertainty about adding  $p$  to CG – examples like (219) are discussed by Kramer and Rawlins (2010) and Holmberg (2013). The 'no' answer that aligns with the  $\neg\text{VERUM}$  analysis of questions, then, is not strong enough.

(219) S: Isn't she coming?

A: Yes. *'she is coming'*

No. *'she is not coming'*

Furthermore, AnderBois (2011) points out that the  $\neg\text{VERUM}$  analysis was designed to account for Ladd's (1981) ambiguity (see chapter 1 for discussion). However, Ladd's ambiguity has no independent motivation in biased questions (Sailor 2013), nor is the scope ambiguity attested anywhere else e.g. in declaratives with VERUM such as those in (215) and (216).

Taking these issues into account, Romero (2015) follows Repp (2009) and posits a high negation analysis using FALSUM, defined as in (220), or FOR-SURE-NOT-IN-CG:

(220)  $\llbracket \text{FALSUM} \rrbracket = \lambda p_{\langle s, t \rangle} \lambda w. \forall w' \in \text{Epi}_x(w) [\forall w'' \in \text{Conv}_x(w') [p \notin \text{CG}_{w''}]]$

(Romero 2015:507)

(221) Isn't Jane coming too?

LF:  $[_{CP} Q [_{FALSUM} [_{IP} \text{Jane is coming too}]]]$

Rather than the negation scoping over a VERUM marker, the negation marker in itself is a FALSUM marker, which Romero argues is *not-at-issue* content following Potts (2005). There is therefore no scope ambiguity present, as there is no true negative operator. The Q operator scopes over both the proposition at hand  $\{\neg p, \neg(\neg p)\}$  and the epistemic operator FOR-SURE-NOT-IN-CG( $p$ ),  $\neg$ FOR-SURE-NOT-IN-CG( $p$ )<sup>45</sup>. Romero (2015) argues that this gives the correct answering possibilities, with 'yes' and 'no' responses targeting the at-issue content.

(222) S: Isn't she coming?

A: Yes. *'she is coming'*,  $\neg(\neg p)$

No. *'she is not coming'*,  $\neg p$

It is not actually clear from Romero's analysis how the answering particles interact with the not-at-issue content; presumably, 'yes' must select for  $\neg$ FOR-SURE-NOT-IN-CG( $p$ ) while 'no' must select for FOR-SURE-NOT-IN-CG( $p$ ). In both cases, 'yes' therefore selects for the negated cell from the partition – the positive proposition comes from the cancellation of the double negation, as seen in (222).

Romero (2015) also uses her FALSUM analysis to account for negation in subjunctive conditionals, and draws parallels with biased questions as well as denials.

(223) A: He found something.

B: Wrong! He DIDn't find something.

$[_{\text{ASSERT}} [_{\text{FALSUM}} [_{\text{he found something}}]]]$

(Szabolsci 2004)

<sup>45</sup>Though not-at-issue content is argued not to engage with any intensional operators, it is appropriate to suggest that the Q operator can scope over not-at-issue content, as Romero (2015) does here. Potts (2005:88) argues that instances of not-at-issue content are commitments made relative to one discourse participant (the speaker) that are always 'interpreted as though they were root-level assertions' regardless of how embedded they are. However, interrogative flip (Tenny 2006, Pearson 2013) means that when combined with a Q operator, the addressee is now being asked to commit to the not-at-issue content too.

1. S: Did Lance Armstrong, an Arkansan, win the Tour de France in 2003?

A: Yes, but he's not an Arkansan.

No. Lance Armstrong, a *Texan*, won the Tour de France in 2003.

2. S: Did that damn dog run away again?

A: No. *Our* dog ran away again.

The Q operator asks the addressee to commit to all parts of the underlying utterance, *including* the not-at-issue content. Therefore, having Q scope over FALSUM is appropriate.

(224) If there hadn't been some oil in the tank, the furnace would have exploded.

[ If [FALSUM [there had been some oil in the tank ]]] (Romero 2015:511)

Having shown that *-int* and *-n* are not true negation, the question arises as to whether a FALSUM analysis is suitable for the Scots *-int* and *-n* data, especially given that tag questions are understood as VP-elided biased questions (van Rooij and Šafářová 2003, Sailor 2011) and that Taniguchi (2017) argued for a  $\neg$ VERUM analysis for exclamatives, making further links between these VERUM/FALSUM analyses and non-canonical questions. However, I think the distribution of the Scots particles alone is enough to reject this analysis. There is no evidence for *-int* in matrix biased questions in Glasgow Scots, and there is evidence that *-n* is being lost from matrix biased questions in Shetland (see section 3.3.2). These markers are therefore not available in the biased question contexts that the FALSUM analysis is designed to account for. It is also worth noting that these markers are not available in subjunctive conditionals (225), or denial contexts (226) either. These are the other contexts that are argued to contain FALSUM markers by Repp (2009) and Romero (2015).

(225) \*If there had'n been some oil in the tank, the furnace would have exploded.

(226) S: Ezra won the race.

A: \*Ezra DINT win the race.

As well as this, I showed in the previous section that in the contexts that use *-int* and *-n* the speaker *is* sure that *p* should be added to CG. It therefore seems unlikely that there would be a need to negate that certainty in the construction, as the speaker does not need nor want to suggest that could be a possibility.

In summary, to the extent that the FALSUM analysis put forward by Romero (2015) may be the correct analysis for biased questions, it is not appropriate to analyse the Scots data in this way. However, there is one part of the  $\neg$ VERUM analysis I would like to draw on. Specifically, the formulation in which there is no question of  $\{p, \neg p\}$ : rather, the 'question' is all about the certainty of *p*.

Based on the pragmatic distribution seen in the previous section, while all of these constructions are taken to be questions in standard English, I argue that there is no need for the speaker to take  $\neg p$  into account in these contexts, and so Scots constructions with *-int* and *-n* are not questions, but rather CHECK moves (to be defined further in the next section). This CHECK purely selects for a proposition in the anchor or main clause, and has more in common with confirmational particles like *right* or *huh*, and suggests that we

should be looking more closely at these sorts of confirmation type constructions in trying to develop an analysis for the Scots data. In the next section, I look to these sorts of constructions rather than interrogatives in order to put forward a semantic analysis for *-int* and *-n*.

### 4.3.3 ‘Check’ moves in the literature

I adopt the term CHECK<sup>46</sup> move as I believe the speaker who produces an *-int* or *-n* marker is *checking* that the addressee shares their belief of the relevant proposition *p*. However, throughout the literature, there are varied definitions of what a ‘check’ move is (Carletta et al. 1996, Ginzburg 2012), as well as varied definitions of ‘confirm/confirmational’ (Reese and Asher 2006, Wiltschko 2014), ‘acknowledgments’ (Asher and Lascarides 2003) and ‘align’ moves (Carletta et al. 1996). There are overlaps in what is considered to fall into each of these categories – for example, Wiltschko and Heim’s ‘confirmational’ are considered by Ginzburg to be ‘check’ moves; furthermore, Carletta et al.’s (1996) ‘align’ moves are treated as ‘check’ moves by Ginzburg, but appear to show more in common with Asher and Lascarides’ ‘acknowledgments’. I will overview these concepts below, with the aim of formulating the semantics of the CHECK move I have posited for the Scots data presented in chapter 3. This will be considerably more specific than either the ‘check’ move as described by Carletta et al. (1996) or as defined by Ginzburg (2012), though I will build on these concepts, and will account for the particular pragmatic distribution of *-int* and *-n* we see in the Scots data. My analysis will also draw on Beyssade and Marandin (2006a,b) and their extension of Ginzburg’s work, importantly arguing for the inclusion of speaker interpretation of addressee belief in the semantic representation (see also Brennan and Hanna 2009, Galati and Brennan 2010).

The first relevant mention of ‘check’ moves comes from Carletta et al. (1996) in their map task corpus; there, the ‘check’ move is defined as a move that requests information that the person doing the checking has some sort of belief about, but is uncertain about. The authors go on to state that usually ‘the information to be *confirmed* is something which the checker’s conversation partner has tried to convey explicitly or something which the checker believes was meant to be inferred from what the partner has said.’ (emphasis own – note the conflation of ‘checking’ and ‘confirming’ in the original definition)

Carletta et al. include a wide range of constructions in their conceptualisation of a ‘check’ move, and give a few examples, repeated here. In example (227), the relevant

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<sup>46</sup>Note that I use ‘check’ to refer to existing mentions of ‘checking’ in the literature; CHECK refers to specifically the analysis I posit for the Scots data.



information to be ‘confirmed’ has just been uttered by the original speaker, G, and F repeats a section of it for confirmation. In (228), [\*] is a true query, while [\*\*] is a ‘check’ that F has been able to infer from the directions given by G. Carletta et al. raise the hypothetical example in (229) to show that ‘check’ moves could be targeting previous dialogue events e.g. *I told you....* However, it is interesting from the perspective of this thesis as it is an example of a tag question; it is also interesting as it links the discourse function of questions asked as responses to statements (227 and 228) and tag questions, asked by the original speaker (229).

(227) G: ... you go up to the top left-hand corner of the stile, but you’re only, say about a centimetre from the edge, so that’s your line.

F: OK, up to the top of the stile?

(228) F: Do you want it to go below the carpenter? [\*]

G: No, I want you to go up the left hand side of it towards green bay and make it a slightly diagonal line towards, em sloping to the right.

F: So you want me to go above the carpenter? [\*\*]

(229) I told you about the landmine, didn’t I?

(examples from Carletta et al. 1996)

While there are a number of possible contexts for ‘check’ moves, the majority of ‘check’ moves in the map task corpus are about some information which the interlocutor has already been told, and therefore some information that is either explicitly in their partner’s discourse commitments (Farkas and Bruce 2010) and/or that is in their partner’s interpretation of the CG/FACTS (Beyssade and Marandin 2006b, Ginzburg 2012).

Ginzburg (2012) presents a similar understanding of ‘check’ moves. However, he also appears to extend the category of ‘check’ to include what Carletta et al. (1996) describe as ‘align’ moves, as seen in examples (230) and (231).

(230) You should be skipping the edge of the page by about half an inch, OK?

(Carletta et al. 1996)

(231) So <pause> I’m allowed to record you. Okay?

(Ginzburg 2012:219)

Carletta et al. (1996) describe these types of utterance with a following *ok?* as instances where the speaker ‘checks the attention or agreement’ (again, note conflation of terms in the original definition) of their conversation partner. They claim these are

generally used in situations where the speaker wishes to check that the transfer of information has been successful (i.e. that the addressee now believes  $p$ ), in order to allow them to downdate this from QUD and move on. Speakers can also use this ‘align’ move directly after an instruction or assertion, perhaps to push for a more explicit response.

This conceptualisation of the ‘align’ move has clear links to Asher and Lascarides’ (2003) ‘Acknowledgment’: an utterance  $\beta$  is an acknowledgment question ( $Ack_q$ ) iff a relationship holds between segments  $\alpha$  and  $\beta$  just in case an answer  $i$  to  $\beta$  entails that the goal of  $\alpha$  has been achieved. For example, then, in a case like (230), there is a relationship between the main assertion and the *ok?* such that an affirmative answer (‘yes’) to the *ok?* indicates that the goal of the main assertion (to instruct the hearer that they should be skipping the edge of the page by about half an inch) has been achieved – the hearer knows that they should skip the edge of the page<sup>47</sup>.

Returning to Ginzburg’s (2012) definition of the ‘check’ move, he includes tag questions (both same and reverse polarity), ‘align’ moves, confirmational particles like *right*, as well as direct questions where the addressee questions the speaker’s directly previous statement. Ginzburg’s definition is thus wider; however, it is the only formal definition that takes into account all of these different types of move. I therefore start with his account in developing the CHECK that I posit for the Scots data, with the aim of narrowing down his broad-brush approach to be able to account for the specific contexts of use of *-int* and *-n* as well as developing a more specific move for canonical tag questions in standard English.

### Ginzburg’s ‘check’ moves

Ginzburg’s (2012) model of interaction in dialogue has a number of core concepts that will be useful in understanding the various conversational moves developed here. Dialogues are modelled around participants’ *Information States*, each of which includes a public and a private component. The public component is referred to as the ‘Dialogue Gameboard’ (DGB) and consists of three parts: FACTS, LatestMove and QUD (Question Under Discussion).

LatestMove is the topmost element of a list called MOVES which tracks the locutionary nature of the last proposition (e.g. whether it was a question, an assertion...) as well as its semantic content. QUD contains propositions and questions which have been introduced to the conversation but have not yet been answered or accepted by all

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<sup>47</sup>Reese and Asher (2006) use this concept of Acknowledgment to interpret nuclear tag questions with falling intonation in standard English. I will discuss this in detail in the next section.

conversation participants; they are still ‘under discussion’. The QUD is assumed to be a stack, with MaxQUD acting as the discourse topic. MaxQUD is the primary topic or question which conversation participants are working towards downdating from QUD. Other information can be added to QUD at any time, but any other questions or assertions must contribute information towards resolving the MaxQUD until such time that the conversation participants deem it able to be downdated.

FACTS is in effect a set of propositions that is assumed to be shared among conversation participants, information that can be embedded under presuppositional operators like *Given that...* . Propositions are added to FACTS once they have been proposed and then downdated (through acceptance) by all conversation participants.

One of the key points of Ginzburg’s theory is that there is no generalised public domain (e.g. the standard formal semantics interpretation of the Common Ground, or Lewis’s scoreboard, where there is a shared public domain (QUD/Table and CG) as well as private individual domains (see e.g. Farkas and Bruce (2010), Malamud and Stephenson (2014) for recent, relevant instances of a dialogue model in the Lewis scoreboard style)). In Ginzburg’s model, everything that is ‘public’ is interpreted through the perspective of the individual. While generally, conversation participants’ set of FACTS will be the same, each speaker is committed to knowing the meaning of their own utterances, but other participants are not committed in the same way to others’ utterances. This permits misunderstandings and slight difference in belief. For example, in the *Friends* episode ‘The One Where Ross Meets Elizabeth’s Dad’, Monica and Chandler have a misunderstanding about the time at which they were meant to meet at Central Perk. During their previous dialogue, Monica’s version of the public domain was updated based on the assumption of a shared belief that the couple were meeting at 6pm. However, in Chandler’s version of the public domain, the assumed ‘shared belief’ was that the couple were meeting at 7pm. Examples like these challenge the notion of a singular public ‘Common Ground’, and are better dealt with in an entirely agent-relative framework like Ginzburg’s dialogue model.

Ginzburg’s definition of the ‘check’ move does not require the private domain, so I will set it aside for the moment; however, the definition of the CHECK move that I will propose will require interfacing with the private component, and thus it will be discussed in more detail below.

Ginzburg defines conversational moves in terms of the preconditions that license them and the effects that they have, both on participants’ DGBs, and their private information states. The ‘check’ move has a clear set of conditions for use, but these are

very broad, given the range of constructions that Ginzburg labels as ‘check’ moves.

Firstly, LatestMove must be that  $p$  was Asserted, and thus  $p?$  is in QUD.  $p?$  is such that  $p$  is not held as a fact, but discussion is open on *whether*  $p?$ . This will continue until all conversation participants decide to downdate  $p$ , accepted or not.

There are no preconditions on FACTS in the ‘check’ move, or on the private component. At this point, the conversational turn is underspecified and therefore either the speaker or addressee can take up the turn and ‘check’. The effect of the ‘check’ move once carried out is that the LatestMove is updated to Check(s, a,  $p?$ ).  $p?$  is thus still in QUD following the Check move, with the only difference being that LatestMove has been updated.

To consider some examples, take the following:

(232) S: (i) G is in town, (ii) isn’t he?

(233) S: (i) G is in town, (ii) is he?

(234) S: (i) G needs to leave at 5, (ii) ok?

(235) S: (i) G is in town.

A: (ii) Is he?

For Ginzburg, all of the examples marked (ii) carry out the same move. In each case, a proposition has been asserted by S in (i). Following the (i) assertion, each participant’s DGB looks as follows, with *cg1* indicating the state of the FACTS is simply as it was prior to the assertion:

LatestMove := Assert(s, a,  $p$ )

QUD :=  $p?$

FACTS := *cg1*

In all four contexts, then, there is no specification on who should take the next turn. Either participant can pick up  $p$  for discussion. In the first three examples, the original speaker takes up the turn, and produces a ‘check’ move. There is no new issue in the QUD, but the context is changed so as to ‘force a response’ from the addressee. In the final case, the original addressee takes up the turn, and thus a turn change move takes place. However, there is still no new issue in the QUD; the context is simply shifted so as to ‘force a response’ from the original speaker. The effects of all four utterances are thus:

TurnUnderspecified  $\wedge_{\text{merge}}$  [LatestMove := Check(s,a  $p?$ )]

leading to a modified DGB such that:

LatestMove := Check(s, a,  $p?$ )  
QUD :=  $p?$   
FACTS :=  $cg1$

The key difference that Ginzburg posits between a DGB with an Assert LatestMove and a DGB with a ‘check’ LatestMove is that while assertions can be *accepted*, ‘check’ moves must be *confirmed*. While many responses can be used in both categories (e.g. ‘mhm’, nodding), Accept moves include ‘I see’ and ‘Aha.’, which are not acceptable responses to ‘check’ moves.

(236) S: G is in town, isn't he?

A: #I see.

(237) S: G is in town.

A: Is he?

S: #I see.

(238) S: G is in town.

A: I see.

However, this cannot hold for all of Ginzburg's ‘check’ moves. For example, an *ok?* tag can be responded to with ‘I see’ by the addressee; furthermore, a speaker can follow-up on their own same polarity tag with ‘I see’ (whether or not the addressee can may depend on a number of factors).

(239) S: G is going to be in town, ok?

A: I see.

(240) S: G is in town, is he? I see.

Ginzburg also distinguishes ‘check’ moves from Ask moves in their answering possibilities: Ask moves can be followed up by an assertion of  $p$ , while ‘check’ moves, it is claimed, cannot. However, again, this seems to vary across constructions. While it is true that falling tag questions cannot be followed up by a fresh assertion of  $p$ , rising tag questions can be. Furthermore, *ok?* tags can also be followed by  $p$ ; as can same polarity tags. In both the rising tag and same polarity tag cases, A repeating  $p$  seems to indicate some uncertainty as to why S is using the ‘check’ move; nevertheless, it is an acceptable response.

- (241) S: Is G in town?  
 A: G is in town (, yes).
- (242) S: G is in town, isn't \he?  
 A: #G is in town (, yes).
- (243) S: G is in town, isn't /he?  
 A: G is in town (, yes).
- (244) S: G is going to be in town, ok?  
 A: G is going to be in town. Ok, got it.
- (245) S: G is in town, is he?  
 A: G is in town (, yes).

Given the evidence presented here, in the previous chapter, and evidence from other work in the literature (e.g. Malamud and Stephenson 2014 on same and reverse polarity tags), it is clear that the various utterance types which are considered by Ginzburg under this umbrella of the 'check' move have different preconditions and also potentially different effects on the continuation of the discourse or response possibilities. I will thus borrow elements of Ginzburg's structure and extend it to develop a definition of the CHECK move in Glasgow Scots and Shetland dialect, before considering the moves that standard English canonical tag questions carry out. I will not provide a full semantic definition but rather highlight existing tools that I believe are necessary to explain the data, as well as areas where new tools are needed.

#### 4.3.4 Towards a semantics of the CHECK move

Recall that *-int* and *-n* were available in tag questions (with a preference for neutral evidential contexts), exclamatives and polar rhetorical questions. In each of these cases, the speaker believes *p* and believes that the addressee shares a belief of *p* – as shown by the cases of commitment revision, predicates of personal taste, the evidential context preference in tag questions, and the loss of availability in matrix biased questions (preferred in challenging evidential contexts, see chapter 5). I adopt the label CHECK move as I posit that given the pragmatic distribution of the *-int* and *-n* markers seen in Glasgow Scots and Shetland dialect, the role of these markers is to *check* the speaker's assumption that the addressee shares their belief of *p*. Although I have shown that these cases are cases where the evidential context surrounding the interaction is neutral to positive, I will assume that

this evidential context is external to the participants' Information States; I treat it as a pragmatic factor that affects the choice a speaker makes to *use* one of these constructions, but is not built into its semantic meaning (see chapter 5 for an experiment on speaker choice of construction in varying evidential contexts). This diverges from the proposals of Trinh (2014), Northrup (2014) and Farkas and Roelofsen (2017) who propose evidentiality accounts for the biases found in interrogative constructions.

I will firstly give an overview of the preconditions I argue must hold in order to produce a CHECK move, arguing that the extended unpublished Information State found in Beyssade and Marandin (2006a,b) is necessary for the definition of this move, as well as partial ordering of FACTS to give RecentFACTS, similar to LatestMove. I will then discuss the CHECK move in itself as an instance of a goal which asks the addressee to commit that  $p$  is part of their beliefs. Finally, I will discuss the downdating procedure for this move, and the addition to FACTS.

As discussed above, Ginzburg's 'check' move does not require use of the private domain of the speaker's Information State. However, he does posit such a domain. For the private component, Ginzburg builds on Larsson (2002) and posits a three part system. Firstly, BEL, a set of beliefs that the speaker holds, effectively corresponding to a private version of FACTS. While FACTS is a set that has been discussed in QUD and downdated as agreed, BEL includes the beliefs a speaker holds that have not been discussed with the addressee. GENRE identifies the conversational genre and allows speakers to develop plans, and AGENDA is a stack of actions that corresponds in some way to MOVES in the public domain. For the purposes of this thesis, the complexity of AGENDA/GENRE and its relationship to another component, PLAN, is not required and so I set aside Ginzburg's formulation of the private domain and instead use the formulation of the *Unpublished Information State* (UIS) put forward by Beyssade and Marandin (2006a,b).

Beyssade and Marandin build on Ginzburg's earlier work in order to deal with intonation patterns in French and their role in attitude attribution. The UIS contains two major subsections: GOAL and BACKGROUND. GOAL contains the intent of the speaker when they produce their utterance – for example, the GOAL of an assertion is to have  $p$  updated to FACTS for all conversation participants. GOAL is, in effect, a simplified version of Ginzburg's AGENDA/GENRE components.

Beyssade and Marandin's BACKGROUND corresponds to Ginzburg's BEL: a set of propositions that the participant (privately) believes to be true. However, as well as positing that speakers store their own set of beliefs (which they label SP), Beyssade and

Marandin argue that there is a second subset of BACKGROUND in which the speaker stores assumptions about what the addressee knows or believes (labelled ADD). The intonation indicates the attitude that the speaker believes the addressee will have towards *p*, and thus how they expect the addressee to respond.

The French intonation patterns, then, are accounted for by the relationship between these two background contexts in Beyssade and Marandin (2006a). When a falling contour is used, this signals that the speaker believes the content of their utterance is *non-defective* (Stalnaker 1978) – the subsets of SP and ADD that include content about the issue under discussion are assumed to be compatible. Non-falling contours (rising; rising-falling; rising from a penultimate peak) are used in *defective* contexts, where the speaker believes that the relevant subsets of content in SP and ADD are at least possibly not compatible.

It is well-established that speakers adapt what they say to suit the needs of their addressees (an ‘audience design’ model of communication (Bell 1984)). Work in psycholinguistics and cognitive processing has investigated the idea of partner-specific adaptations in speech by looking at, for example, convergence and attenuation in narrative tasks, showing that speakers move from full NPs to pronominals, shorten descriptions and even speak faster when information is no longer new to the discourse (Clark and Wilkes-Gibbes 1986, Clark and Schaefer 1989, Gundel et al. 1993, Brennan and Clark 1996, Bard et al. 2000, Horton and Gerrig 2002). However, there has been some debate about the point at which this sort of ‘audience design’ takes place in dialogue. On one hand, it has been argued that speakers are *egocentric* and do not take account of their addressee’s knowledge in the early stages of speech production. Speakers may appear to adapt to their addressees, but this is more coincidence than active modification. Instead, addressee adaptation happens later, as something more like ‘repair’ (Brown and Dell 1987, Keysar et al. 1998a,b, Bard et al. 2000, Ferreira and Dell 2000, Pickering and Garrod 2004, Kronmüller and Barr 2007). Pickering and Garrod (2004) argue this is because it would be cognitively costly to keep track of a ‘full common ground’ – e.g. which conversation participants are committed to what – at all times. This would mean that a model like Beyssade and Marandin’s would be too expensive, as it relies on the speaker keeping track of the addressee’s knowledge state at all times.

However, work from e.g. Metzging and Brennan (2003), Hanna et al. (2004), Hanna and Tannenhaus (2004), Brennan and Hanna (2009), Matthews et al. (2010), Galati and Brennan (2010) has argued that in fact, adaptation to addressee beliefs is not ‘repair’ but happens as early as speaker beliefs, challenging the *egocentric* model of dialogue. Brennan



(see Brennan and Hanna 2009, Galati and Brennan 2010) argues for a ‘one-bit’ model of speaker interpretation of addressee beliefs, in which only minimal information is stored about the addressee’s beliefs – only to the extent that there are A/B possibilities, such as *I have told this person this story before* or not; *This person is currently looking at the same scene as me* or not. These ‘one-bit’ examples can be categorised in three ways: whether there is ‘linguistic co-presence’ (where some information is part of the shared discourse record with the addressee), ‘physical co-presence’ (where both participants have access to the same evidence within their shared perceptual environment) and ‘shared sociocultural background’. Within these subsets of shared information, if the relevant belief about the addressee’s knowledge can be deduced from an inference that has already been made, or can be rapidly established due to context, it can be taken into account at the earliest stages of utterance production. I believe that these are exactly the types of information that need to be taken into account in the specific pragmatic distribution of *-int* and *-n*: as we saw, there is no reason why the relevant *p* can’t be in FACTS already through the previous discourse record, though there does appear to be a recency effect in the acceptability. Similarly, the exclamative contexts where *-int* and *-n* are allowed in their respective varieties rely, if not on the previous discourse record, then on the physical co-presence of information, such as a beautiful sunset. It is also the case that assumed shared sociocultural background can lead to CHECKING of *p*. For example, two ex-pupils of the same school may, twenty years later, have a conversation in which one says ‘*Mr P was awful, wint he?*’ and the other agrees without them ever having had a dialogue about this; the tag can be produced purely on the basis of the assumed shared sociocultural knowledge of the school they both went to.

I thus follow Beyssade and Marandin (2006a, 2006b) in dividing the BACKGROUND component of the speaker’s Information State into SP and ADD sections. The SP component consists of the set of utterances that the speaker believes. The ADD component contains information about what the speaker believes the addressee believes. This may be a general characterisation of the addressee; their sociocultural status in relation to the speaker, their physical location, as well as information about previously discussed topics.

In what I refer to as CHECK moves, I propose that the speaker must be able to be a source for the relevant proposition (Gunlogson 2003). Generally, I take it that the speaker will be an *independent source* for the proposition: a conversation participant will be an independent source for *p* if they are committed to *p* and if their commitment to *p*

in the particular discourse context is not dependent on another conversation participant's 'testimony' that  $p$  holds. For CHECK moves, then, this means that the speaker is willing to take responsibility for addition of  $p$  to the shared ground between the conversation participants, and that the speaker would be able to do this independently of the beliefs/opinions of any of their interlocutors. Therefore,  $p \in \text{SP}$ . I take SP to include all propositions that the speaker has independent reason to believe; propositions that are dependent on the addressee's testimony of  $p$  (and therefore in which the speaker is only a *dependent source*) can only become part of SP if they first become part of the shared ground between the participants<sup>48</sup>.

Furthermore, and what I consider to be the most important precondition for  $\text{-int}$  and  $\text{-n}$ ,  $p \in \text{ADD}$ . The speaker assumes that the addressee also shares their belief of  $p$ . Of course, it is not the case that the addressee *does* necessarily believe  $p$ :  $p \in \text{ADD}(s) \not\rightarrow p \in \text{SP}(a)$ . However, through the speaker-mediated perspective of ADD, it is assumed by the speaker that  $p \in \text{SP}(a)$ . This combination of BACKGROUND preconditions immediately narrows the scope of the CHECK move as compared to Ginzburg's definition, which had no restrictions based on belief states. For example, under Ginzburg's model, both canonical tag questions with rising intonation and particles like *right* are labelled as 'check' moves. However, both constructions are permitted in contexts where the speaker can no longer attribute the belief to the addressee (see (189), above).

The other important part of the UIS is the GOAL of the utterance. However, in order to fully understand the GOAL of the CHECK move, it is first pertinent to consider the preconditions that must hold in the public component of the dialogue, the DGB. Recall that for Ginzburg's 'check' move, it was simply the case that the LatestMove had to be an assertion of  $p$ , which a 'check' move could then address. It is worth considering firstly whether a simple restriction on LatestMove where  $\text{LatestMove} = \text{Assert}(s, a, p)$  would be adequate to deal with the CHECK move. Certainly, this works for the tag contexts: the speaker has asserted the proposition in  $p$ , and then continues the turn with a CHECK. However, this cannot be the case for exclamatives. For example, take a context where two friends meet each other on the street in Glasgow in July. It's a lovely, warm day, and both people are looking happy. One can easily say to the other '*Int it a lovely day!*' with no LatestMove (or perhaps following only Greet/CounterGreet moves – however, there could be situations where there was no LatestMove: for example, two friends who have just come off a rollercoaster; one says to the other '*Wint that awful!*'). We can therefore conclude

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<sup>48</sup>It is not necessarily the case that dependent propositions will become part of SP, but it is possible that they can. Independent propositions must be part of SP.

that there is no restriction of LatestMove to assertion with the Scots CHECK move.

Another important point of Ginzburg's 'check' move was that the following turn was underspecified: e.g. either speaker could produce a 'check' move following the assertion. It is not the case that the turn is underspecified following the assertion in the tag question contexts; for example, it is not licit for a speaker to produce the assertion *He can come*, and the addressee to produce *can'n he?*. It would, however, be possible for a speaker to produce an assertion like *It is a beautiful day!* and the addressee to produce something like *is'n it?* in response. However, this is only possible in contexts where it is possible to get the sort of scalarity interpretations that license exclamatives (Zanuttini and Portner 2003, Wood 2014, Taniguchi 2017), so that the addressee is adding further information to the original assertion (e.g. checking that the original speaker believes *p* to the same (high) extent that they do). It is not acceptable for an addressee to do this in a situation where there is no possible scalar interpretation, as seen with the *can'n* example. The CHECK cannot be taken up by an addressee when the speaker has just asserted their belief of *p*. The speaker has thus made it clear that  $p \in \text{SP}(s)$  and so it would be redundant for the addressee to CHECK this. I thus assume that the response exclamation exemplifies an addressee taking up a turn following a speaker's assertion that the speaker did not believe required CHECKing.

It is thus not that there is an underspecified turn following an assertion, but that any conversation participant can produce a CHECK move, as long as their interlocutor's belief of *p* is not currently explicit in the dialogue.

Although there is no specification on turn-taking, I believe that there is specification on QUD, or at least on topicality. CHECK moves cannot be used in 'Free Speech' contexts, where QUD is empty and any conversation participant is able to put any proposition or question forward for discussion. For example, in (246), the participants meet and greet each other, and then there is a Free Speech context. S cannot produce the CHECK move out of the blue. This contrasts with the *Int it a lovely day!* example as there, there is the physical co-presence of the weather and otherwise pleasant day that the speaker can comfortably assume is shared between themselves and the addressee.

(246) *S and A meet on the street. They were at the same concert a couple of weeks ago, but haven't seen each other since.*

S: Hi.

A: Hi.

S: # Wis'n that concert great!

There is a contrast with the example in (247). There, S has implicitly introduced the concert into QUD in the assertion (i); it is then felicitous for either participant to produce the CHECK move about the concert's quality – here, the speaker does it in (ii).

(247) *S and A meet on the street. They were at the same concert a couple of weeks ago, but haven't seen each other since.*

S: Hi.

A: Hi.

S: (i)I haven't seen you since that concert. (ii)Wis'n it great!

Rather than arguing that there needs to be a LatestMove of an assertion in order to license the CHECK move, then, I argue that there must be an available *topic* in QUD. This topic can come about in a number of ways. The most obvious way for the topic to be added to QUD is via an assertion, in which the speaker takes responsibility for  $p$  in QUD with the aim of adding  $p$  to the shared ground for all conversation participants. When the speaker asserts  $p$ ,  $p?$  is added to QUD; discussion on the topic of  $p?$  is, if not expected, certainly possible. However, the topic can be added to QUD in other ways, such as in (247) above, where the topic is added by an assertion related to *that concert*. Furthermore, the topic can be added through the physical co-presence (Galati and Brennan 2010). If both participants have access to the same contextual evidence that strongly suggests  $p$ , a CHECK move can be uttered. To extend the concert example even further, in example (248), S and A bump into each other right outside the concert they've just been to. In this case, it is acceptable for S to use a CHECK move straight away, based on the physical co-presence of evidence; note that it would also be felicitous for A to use a CHECK move in this context too.

(248) *S and A are leaving a concert venue when they bump into each other. Neither knew the other was attending.*

S: Hi!

A: Hi!

S: Wis'n that great!

The final relevant part of the DGB preconditions for the CHECK move is preconditions that hold on FACTS, the component of the DGB which stores the speaker's interpretation of the shared commitments that hold between the conversation

participants. The relationship between QUD and FACTS is clearly of importance to the dialogue model as a whole: in order to understand interactions, we need to understand how something which is in QUD is added to FACTS and whether/how information is shared between them. Ginzburg (2012:89) formulates a ‘Question Introduction Appropriateness Condition’: A question  $q$  can be introduced into QUD by A only if there does not exist a fact  $f$  such that  $f \in \text{FACTS}$  and  $f$  resolves  $q$ . Certainly, this holds for canonical questions, whereby the speaker cannot ask a question if it has already been resolved by some part of the previous discourse. However, this is not entirely accurate for cases where the CHECK move can be used. Ginzburg (2012:306) himself suggests that rhetorical questions are simply *restatements* of assertions that answer the question. Furthermore, Biezma and Rawlins (2017) argue that the proposition at the core of a rhetorical question is already in CG, but there is no explicit commitment to it in the discourse from any conversation participant – use of the rhetorical question is about making the commitment to  $p$  explicit. I note that it is also possible for tag questions to be used in a context where  $p$  has previously been added to FACTS and downdated from QUD: in an example like (249), it would not be possible for S to ask the polar question *Is Ross coming?* – however, it is ok for them to ask the tag question<sup>49</sup>.

- (249) S:     So who’s coming to the party tonight?  
 A:     Err Ross, Khalid, Lori...  
*(conversation about party preparation continues for some minutes)*  
 A:     What should we buy?  
 S:     Ross is coming, int he?  
 A:     Beer, then.

I closely follow Biezma and Rawlins in my understanding of the CHECK move and its relationship to FACTS: it is ok if  $p \in \text{FACTS}$  (though it is certainly not a precondition that it has to be; importantly, there is no precondition against it), but there cannot be any recent public commitment by any conversation participant to  $p$ . In order to model this appropriately, there must be some form of ordering that holds within FACTS whereby updates which are downdated from QUD into FACTS are also held as live public commitments within FACTS for a period of time following their downdating: they are no longer under discussion, but they are also not accessible for further re-commitment at that time. This is similar to the idea of LatestMove as the top of a stack of conversational moves: I do not argue that conversation participants keep track of

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<sup>49</sup>A rhetorical polar interrogative would also be acceptable in this context.

who committed to every single proposition, or what is part of each individual participant’s commitment set (Farkas and Bruce 2010, Farkas and Roelofsen 2017) or that the ordering information is necessarily retained in the longer term. However, I believe this level of ordering in the FACTS domain is necessary in order to account for the distribution and required preconditions on CHECK. This does require redefining FACTS as a partially ordered set of propositions, similar to QUD but without the relationship of a dependence to MaxQUD; simply, there are propositions at the top of FACTS which are the most recently downdated; after a certain point, these propositions are pushed down the stack and out of the top section. They are thus available for re-commitment. I label the top of the FACTS stack RecentFACTS.

I suggest that it is also less likely that something the speaker is an independent source for will be re-committed using a CHECK move. If the speaker is an independent source for  $p$  (and thus  $p$  has always been part of SP), and the addressee has already signalled their agreement with or belief of  $p$  by allowing it to be downdated into FACTS, there is very little reason for the speaker to then CHECK that the addressee believes  $p$  – this would appear to indicate distrust in the addressee, as the speaker appears to be assuming that the addressee has not updated their beliefs accordingly. On the other hand, if the speaker is only a dependent source for  $p$  (as in (249)), it is possible for the speaker to use a CHECK for re-commitment as they are then deferring to the addressee. This therefore does not require keeping track of who committed to what, but simply that the speaker knows whether or not  $p$  is part of SP.

The preconditions I posit thus far for CHECK moves are as follows:

UNPUB	BACKGROUND	SP	:= $p$
		ADD	:= $p$
	GOAL		:= (to be discussed)
DGB	LatestMove		:= $\neg(\text{Ask}(s, a, q) \vee \text{Command}(s, a, i))$
	QUD		:= $p?$
	FACTS		:= $p \notin \text{RecentFACTS}$

Once again, it is important to note that it is not the case that these conditions are conditions which cannot license tag questions, exclamatives or rhetorical questions in other varieties, including standard English. However, the argument I am making is that the CHECK move has specialised in Glasgow Scots and Shetland dialect to require this very specific set of preconditions, which are a subset of the broader conditions that permit non-canonical questions in English.

Given these preconditions, we can now consider what the GOAL of the CHECK move is. Recall the cases of commitment revision we saw in the previous chapter. The speaker who produces the CHECK move does not feel unable to commit to  $p$  without addressee backing; they are at that moment, an independent source with a belief of  $p$ , which has been modelled in the preconditions above. However, the GOAL of the move cannot simply be to add  $p$  to FACTS; this could be achieved by a simple assertion and thus there would be no reason to use a CHECK move. I therefore posit that the GOAL of the CHECK move is to have the addressee make explicit their belief of  $p$ , and to add that the addressee is also a source for  $p$  to FACTS (as well as to add  $p$  itself – whether that is in the anchor of the tag, or the body of the exclamative/rhetorical question construction (see section 5.4 for a syntactic analysis)).

Note that this does not *force* an addressee to respond: it is not like a question which must be resolved in order to be downdated. Clearly, a response is encouraged – the speaker is making a claim about the addressee’s beliefs which can only be a hypothesis, and the addressee should have final say on their own belief state – but it is not required.

The effects of a CHECK move, then, are as follows.

$$\begin{aligned} \text{LatestMove} & := \text{CHECK}(s, a, p) \\ \text{QUD} & := \begin{array}{l} p? \quad \wedge \\ p \in \text{SP}(a) \end{array} \end{aligned}$$

The final piece of the puzzle is how downdating takes place. Downdating is agent-relative, and takes places when participants decide that there is no further discussion that needs to take place regarding any  $q$  or  $p?$  in QUD. Acceptance leads to downdating of assertions: if both conversation participants have Accepted  $p$ ,  $p$  can be added to the shared ground (or each of their FACTS sets). As we saw in the *Friends* example above, it can be the case that conversation participants’ interpretations of what  $p$  is differ; this is accounted for by the individual, relative FACTS sets. Acceptance moves encapsulate a range of different possible ways to accept  $p$ , including ‘mhm’, nodding, ‘yeah’ and also ‘I see’ or ‘Aha.’.

For Ginzburg, a ‘check’ move cannot be *accepted*, only *confirmed*. However, the only actual difference that he posits between accepting and confirming is that acceptances are preceded by assertions, while confirmations are preceded by checks.

However, as we saw above, this isn’t the case for all of Ginzburg’s ‘check’ moves. While many acceptance moves are also ‘confirmation’ moves, the two that are not ‘I see’ and ‘Aha’. However, from the ‘check’ moves that require them, it seems that the crucial

link in those constructions that do permit these ‘accept’ move is that they are used when the conversation participant does not already have a belief of  $p$  – as seen in (250-252).

(250) S: G is going to be in town.

A: I see.

(251) S: G is going to be in town, ok?

A: I see.

(252) S: G is in town, is he? I see.

When the participant producing the ‘confirmation’ move *does* already have a belief of  $p$ , ‘I see’ is not a possible move<sup>50</sup>. Rather than saying that these are distinct moves, then, it seems to me that it is more appropriate to consider that there is simply one category of ‘acceptance’ moves, which, like questions and tags, can be specified for speaker/addressee beliefs.

The acceptances that require a lack of participant belief, then, are not acceptable following CHECK moves because the speaker has already indicated that they believe  $p$  is already part of the addressee’s beliefs. However, I will set this aside here, and focus on what happens to CHECK moves following acceptance.

Ginzburg (2012:86) formulates the effects of a FACTS update / QUD downdate as follows, given an existing discourse state where the LatestMove was either an ‘accept’ or ‘confirm’ move and the QUD is  $p$ ?:

$$\text{FACTS} := \text{pre.FACTS} \cup p$$
$$\text{QUD} := \text{NonResolve}(\text{pre.QUD}, \text{FACTS})$$

The addition of  $p$  to FACTS is a simple union. In order to downdate from QUD, Ginzburg posits the function NonResolve, which maps the new set of propositions in FACTS to the partially ordered set of questions in QUD and returns a new partially ordered set of questions which is the same, except with the questions that have been resolved by information in FACTS removed.

I propose that the update following the acceptance of a CHECK move is very similar;  $p$  is added into FACTS, and downdated from QUD. Furthermore, I propose that  $p \in \text{SP}(a)$  is also added into FACTS for the speaker only.

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<sup>50</sup>Except in a case of pretence. The same can be said of ‘confirmation’ moves like *sure* and *ok*, which seem to indicate active acceptance and acknowledge a new understanding on behalf of the conversation participant which was not previously available.



$$\begin{aligned}\text{FACTS} & := \text{pre.FACTS} \cup p \wedge p \in \text{SP}(a) \\ \text{QUD} & := \text{NonResolve}(\text{pre.QUD}, \text{FACTS})\end{aligned}$$

For the addressee, they are already aware that  $p$  is part of their BEL set; the purposes of the addressee adding  $p$  to FACTS is to register that  $p$  is part of the shared ground and not just part of their individual beliefs.

$$\begin{aligned}\text{FACTS} & := \text{pre.FACTS} \cup p \\ \text{QUD} & := \text{NonResolve}(\text{pre.QUD}, \text{FACTS})\end{aligned}$$

The idea of non-conventional content being added into FACTS is established in Ginzburg (2012:297) for cases where the addressee makes it clear that they do not want to discuss the topic at hand, e.g. by changing the subject, or saying ‘no comment’. Ginzburg proposes that although the explicit content of the utterance is not ‘I do not wish to discuss this’,  $\neg\text{WishDiscuss}(a, \text{MaxQUD})$  is added to FACTS through an *irrelevance inference*. In this case, LatestMove only consists of the conventional content of the utterance. For example, if the addressee avoids a question by talking about the weather, the LatestMove is only the conventional content of the utterance about the weather; the fact that the addressee does not want to discuss the issue is an inference. I posit that other not-at-issue content can be dealt with in a similar way.

In the CHECK move case, then, the accept utterance that follows the CHECK targets specifically the conventional, at-issue content of the utterance. If not denied, the fact that  $p \in \text{SP}(a)$  can simply be added to FACTS. However, this can be denied in multiple ways: firstly, if the addressee denies  $p$ , then the whole update will not proceed. It may continue to be MaxQUD if the speaker chooses to push the point for further discussion, but it may also be dismissed entirely. Secondly, if the addressee denies existing belief of  $p$  but accepts that it holds (e.g. the commitment revision cases), the move must be remade as an assertion where the speaker takes full responsibility for  $p$ . This is further evidence that  $p \in \text{SP}(a)$  is not-at-issue; it cannot be an explicit antecedent; however, it can be directly updated into FACTS as adjacent to the proposition.

### 4.3.5 Canonical tag questions in English

As the pragmatic contexts discussed in section 4.2 above also hold for tag questions with falling intonation in standard English, it is important to compare the analysis I have posited for CHECK moves in Scots varieties with the equivalent constructions in standard English (and also the standard tag question constructions in Scots). I will focus on the case of canonical tag questions here; I discuss polar rhetorical questions in chapter 6.

Although CHECK moves can be used in the same contexts as falling intonation tag questions in standard English, I argue that English tag questions are not CHECK moves. In general, my analysis for standard English canonical tags sits closely with Reese and Asher (2006): here I will outline their analysis, and point out where my analysis differs.

To begin with, Reese and Asher (2006) argue that in nuclear tag questions, the anchor and the tag are separate clauses which make separate speech act contributions. The meaning of the clause is then derived from the paratactic relationship between them, rather than originating as a singular complex unit. I believe that this is the correct approach, unlike the complex speech act posited by e.g. Krifka (2014) or Farkas and Roelofsen (2017)<sup>51</sup>, as prosodically, the anchor and the tag are contained in separate intonation phrases (Ladd 1981, Asher and Reese 2007, Dehé and Braun 2013). Syntactically, too, there is evidence in favour of the tag question being a straightforward case of VP-ellipsis of a question rather than any sort of complex copy/movement analysis (Sailor 2011).

As basic definitions, Reese and Asher state that the anchor has the default speech act of communicating that the speaker believes  $p$ , with the goal that the addressee comes to believe  $p$  too. The tag has the default meaning of a question  $q$ , which is that the speaker believes an answer to the question. In the nuclear tag question with falling intonation, then, because the speaker asserts  $p$  in the anchor, the addressee infers that the speaker believes  $p$ , and therefore that  $p$  is the Known Answer to  $q$  in the tag. The addressee then accepts the belief of  $p$ , following the default goal of the anchor, and thus the tag is an Acknowledgment move (Asher and Lascarides 2003). As detailed in section 4.3.3, being an Acknowledgment move means that an answer to the tag entails that the goal of the anchor has been achieved – namely, the transfer of the belief from speaker to addressee.

Interestingly, Reese and Asher take this to be the default interpretation, despite the fact that falling intonation is generally marked in polar questions (Banuazizi and Creswell 1999, Bartels 1999, Dehé 2017). They do not assign any meaning to the falling intonation, but present it in contrast to the meaning of rising intonation tag questions, which they describe as Confirm moves. Again, the speaker asserts a belief of  $p$  with their assertion in the anchor. However, the final rise on the question is taken to mean that the speaker believes that the proposition at the core of the question in the tag, is *possible*. Therefore,

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<sup>51</sup>Like Reese and Asher (2006), I believe post-nuclear tags, on the other hand, *are* complex speech act types; unlike nuclear tags, they do not have separate intonation phrases and they license both *after all* – only permitted in declaratives – and *by any chance*, which is only permitted in unbiased questions, suggesting that the anchor is not properly asserted in these cases, nor is the question fully asked. I do not propose a semantic analysis for post-nuclear tags in this thesis.

between the assertion of the anchor (S believes  $p$ ) and the final rise on the tag (S believes  $\diamond\neg p$ ), there is *inconsistency* and therefore the assertion is only *weakly* asserted. It is not possible for A to accept a belief of both  $p$  and  $\neg p$  simultaneously: this thus blocks the Acknowledgment inference, because it is not possible for the goal of the anchor to follow from the conflicting information presented in the tag.

Certainly, there are many positive aspects to Reese and Asher's analysis: firstly, the fact that different meanings are assigned to rising and falling nuclear tag questions, and that the anchor and tag are treated as contributing separate pieces of the meaning. However, I believe that their general approach to the meaning of intonation is not quite accurate when looking at matrix biased questions, thus bringing its meaning of weak possibility into question. Domaneschi et al. (2017) find clear patterns of usage where low negation is used in cases where the speaker believes  $\neg p$ , and high negation is used where the speaker believes  $p$  but may be being challenged by some evidence. In both cases under Reese and Asher's account, the speaker would believe  $\neg p$  to be possible. In both low negation and high negation cases, it is true to say that the speaker believes  $\neg p$  to be possible, but this generalisation does not capture the actual differences in belief of the speaker that leads to difference in usage patterns.

If intonation has such a strong semantic input to a construction, it would also not be possible to explain the lack of impact of intonation on the interpretation of tag questions in the Scots data gathered in this thesis, nor in fact to reconcile the acceptability of rising intonation with the meaning of the CHECK move given above.

Finally, this understanding of canonical tag questions as Acknowledgement moves is unable to capture the differences in behaviour and in licensing conditions between these constructions on the one hand and a tag like *ok?* on the other, which does appear to have some sort of 'acknowledgment' meaning in the sense that Asher and Lascarides (2003) define.

Rather than arguing that rising and falling tag questions produce different conversational moves, I wish to argue that in both contexts, the meaning of the tag is the same – a simple question, as Reese and Asher posit. The difference in meaning comes entirely from the intonation. I follow Gunlogson (2008) in arguing that the contribution of rising intonation is *contingency*<sup>52</sup>. The move toward understanding rising intonation as contingency rather than as putting a proposition 'up for question' (Truckenbrodt 2015), or as marking a proposition as possible (Reese and Asher 2006), re-frames it as a pragmatic meaning, rather than semantically triggering some sort of question or

confirmation speech act. This is a positive move, in light of the results in chapter 3 in which intonation did not affect speakers' comprehension of the speech act taking place – the meaning for them was clearly more flexible, and able to be influenced by context.

Regarding contingency, I repeat Gunlogson's definition here (see also section 1.1.5):

'A discourse move  $\mu$  by an agent  $\alpha$  is contingent on a discourse condition  $\delta$  if:

- (a)  $\delta$  does not obtain at the time of  $\mu$ ; and
- (b) It is inferrable from the discourse context that the update effected by  $\mu$  is to be retained only if  $\delta$  obtains after the discourse move immediately succeeding  $\mu$ .'

(Gunlogson 2008:129)

In falling intonation nuclear tag questions, then, the anchor proposition is a Known Answer to the question in the tag, as Reese and Asher propose. The speaker has already put  $p$  forward, indicating that it is part of their beliefs, and that they wish for it to be added to the shared ground. However one wishes to formulate the semantics of a question, the speaker's belief of the answer is already given in the tag; the lack of rising intonation indicates that the discourse move (the tag question) is not contingent on the addressee's next move e.g. whether or not the addressee confirms  $p$ . This accounts for the corpus examples we saw in section 4.2.3 where the proposition could be accepted without explicit response from the addressee, as well as the commitment revision cases: acceptance of  $p$  is not contingent on the addressee's ability to answer the question. Furthermore, the question is answered by the speaker's assertion, and so can be downdated without requiring a full answer, explaining the unacceptability of restating the assertion after the tag question.

In the rising intonation case, the proposition in the anchor is still put forward as a Known Answer to the question in the tag; the speaker has presented their willingness to take responsibility for  $p$  and to add  $p$  to the shared ground. However, the rising intonation adds *contingency*. The speaker is presenting a question, and though they have indicated that they believe there is a Known Answer that they wish to take responsibility for, the acceptance of the proposition is contingent on the addressee's answer to the question.

I believe that this analysis can account for the fact that rising intonation tag questions are not especially common (Dehé and Braun 2013). Rising intonation tags are used in situations with challenging evidence (Ladd 1981), but in order to present a 'Known' Answer in a situation with challenging evidence, a speaker must have an

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<sup>52</sup>I do not take a position on whether it is one particular part of the intonation contour that contributes the specific meaning of contingency, or whether it is the whole contour. Further research would be required to establish potential contributions of different individual tones and the relationship between them, as Pierrehumbert and Hirschberg (1990) and Truckenbrodt (2015) do.

exceptionally high degree of belief in the proposition – or a strong bouletic desire for  $p$  to be true. I will discuss this in more detail in chapter 5 where I present the results of an experiment looking at the preferred usage of tag questions and matrix biased questions based on evidential context<sup>53</sup>.

This analysis can also be couched in Ginzburg’s framework, used to discuss CHECK moves, above. Note that there is a turn-taking constraint, in which the turn must be continued by the original speaker; furthermore, a similar constraint on RecentFACTS must hold – speakers can reassert things from earlier in the discourse using a canonical tag question.

UNPUB	BACKGROUND SP	:= $p$
	GOAL	:= $p \in \text{RecentFACTS}$
DGB	LatestMove	:= $\text{Assert}(s, a, p)$
	QUD	:= $p?$
	FACTS	:= $p \notin \text{RecentFACTS}$

There are clear links to CHECK moves here, but with a number of differences: the turn must be held by the original speaker, and importantly there is no requirement that the speaker believes that the addressee believes  $p$  – they may, but that is not central to the meaning of the tag question.

The effect of the tag is thus as follows:

$$\begin{aligned} \text{LatestMove} &:= \text{Ask}(s, a, q) \\ \text{QUD} &:= \text{MaxQUD: } p? \\ &\quad \text{q} \end{aligned}$$

FACTS update and QUD downdating take place as expected in Ginzburg (2012:87). Accepting  $p$  with e.g. ‘yeah’ accepts it into FACTS;  $p$  is the MaxQUD, and in this case resolving the MaxQUD means that its related sub-questions can also be resolved. The question is therefore not ‘answered’ in the same way as a true question, or a tag question with rising intonation, which does not automatically resolve on acceptance but requires an answer (and permits a fresh assertion of  $p$ ).

<sup>53</sup>This analysis (and Reese and Asher’s) is unable to explain the requirement for tag questions to be of reverse polarity to their anchors. I note that same polarity tags tend to be used when the speaker has no existing prior belief of  $p$  but believe that the addressee *does* believe  $p$ ; furthermore, same polarity tags are produced with rising intonation as default.

- (i) Kamasi is coming, is he?

I believe there can still be a Known Answer aspect here, but the question remains as to why the polarity switch is used in cases where the speaker knows the answer based on their own beliefs, but same polarity tags in cases where the Known Answer comes from the addressee’s beliefs.

Having established an analysis for standard English tag questions, it is worth comparing with a couple of recent works which have also considered the semantics of tag questions: Farkas and Roelofsen (2017) and Malamud and Stephenson (2014). I will discuss Farkas and Roelofsen (2017) first, as they provide a compositional semantics for tag questions that is comparable to Reese and Asher (2006) – however, I believe there are a number of issues with their analysis.

Secondly, I will compare Malamud and Stephenson (2014) to the Ginzburg discourse model. Malamud and Stephenson adopt and extend Farkas and Bruce’s (2010) Table model for dialogue; their approach has been popular and I will assess whether the CHECK move (and falling canonical tag question in standard English) could also be accounted for in this framework.

### **Farkas and Roelofsen 2017**

Farkas and Roelofsen (2017) posit an analysis for declaratives, interrogatives and tag questions, tying their various syntactic forms to their intonation. Here, the word order of a question gives a construction INT force; the word order of a declarative gives a construction DEC force. Rising intonation creates OPEN discourse; falling intonation creates CLOSED discourse.

DEC force simply provides a non-inquisitive proposition, which is informative and does not present possible alternatives:  $\lambda P.!P$ , while INT force gives an inquisitive proposition:  $\lambda P.?P$ . With an inquisitive proposition, some information is still to be resolved in something to be added to the participants’ commitment sets, with a commitment set defined as the set of worlds compatible with everything that a participant is publicly committed to<sup>54</sup>. CLOSED has no semantic meaning in Farkas and Roelofsen’s framework, but OPEN gives an inquisitive proposition in the same way as INT force:  $\lambda P.?P$ .

The authors then argue for a compositional semantics for the four relevant parts. Given that DEC gives a non-inquisitive proposition and CLOSED has no semantic output, a declarative with falling intonation always has non-inquisitive semantics. For rising declaratives, DEC gives a non-inquisitive proposition, but OPEN, added through the rising intonation, means that the clause becomes inquisitive. The idea that rising intonation makes a clause an interrogative has been common elsewhere in the literature

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<sup>54</sup>For Farkas and Roelofsen, the Common Ground is simply a union of all conversation participants’ commitment sets:  $cg = \cup\{cs(x) \mid x \in \text{participants}\}$ . There is therefore no CG/FACTS component in their model, although it can be derived from the extant commitment sets.

(Pierrehumbert and Hirschberg 1990, Truckenbrodt 2015, Wiltschko and Heim 2016), giving full semantic meaning to intonation, unlike the pragmatic meaning that Gunlogson (2003, 2008) puts forward (and that I support in this thesis).

Finally, given that INT provides an inquisitive proposition which is inherently open, any subsequent addition of OPEN or CLOSED through intonation is vacuous. Regardless of intonation, then, a question is inquisitive. The relevant diagrams for the three constructions are presented in Figure 4.1.

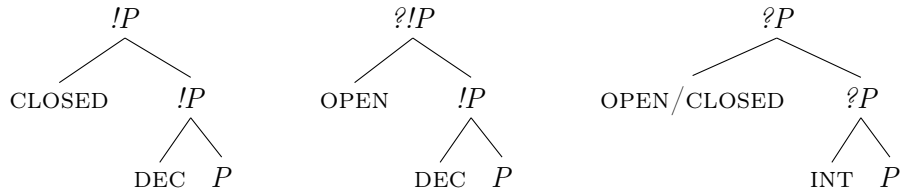


Figure 4.1: Falling declaratives, rising declaratives and questions in Farkas and Roelofsen (2017).

Farkas and Roelofsen then go on to apply these same compositional principles to tag questions. They argue for a structure in which a declarative (DEC with CLOSED intonation, as seen in the anchor clause) is embedded under an inquisitive operator (INT, contributed by the tag itself), with either OPEN or CLOSED intonation, as seen in Figure 4.2.

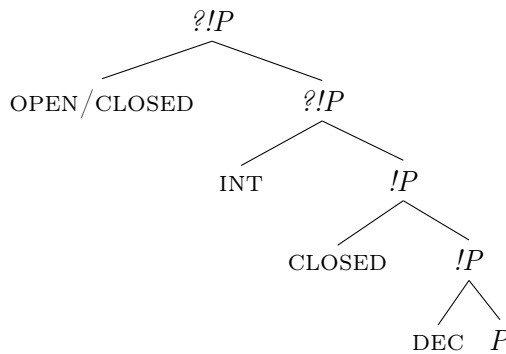


Figure 4.2: Tag questions in Farkas and Roelofsen (2017).

The first issue that I see with this analysis is that this QUESTION•ASSERTION type construction is unnecessarily complex for a nuclear tag question: given that there are separate intonation phrases and possibilities for commitment revision, there is no reason to fully embed the anchor under the interrogative operator. Secondly, this does not give an accurate syntactic representation of the tag, requiring some sort of movement analysis (Culicover 1992, den Dikken 1995) to get the correct interpretation where the interrogative scopes over the declarative, rather than the preferable VP-ellipsis analysis detailed in the

next section (Sailor 2011).

Primarily, however, the main issue in the Farkas and Roelofson story is that the inquisitive construction in the tag can then either be OPEN or CLOSED depending on the intonation associated with the tag. Firstly, although speakers can show sensitivity to differences in prosody (see chapter 4.4.4 for discussion), in constructions like tag questions, variation in prosody does not seem to contribute significant differences in interpretation. Therefore, it cannot be that inquisitive semantics are fully contributed by prosody. Secondly, although the intonation does not appear to contribute strongly to semantic meaning when it comes to interpretation, there are still nevertheless contexts in which speakers prefer to produce rising or falling intonation on tag questions (Ladd 1981, Dehé and Braun 2013) as well as some indication that there is different intonation used in different contexts for matrix biased questions (Domaneschi et al. 2017) and in rhetorical questions (Dehé 2017). To argue that there is a full semantic meaning to the intonation but then to say that it is ‘vacuous’ for production in interrogatives seems unintuitive given these usage preferences: rather, some form of pragmatic account of the influence of prosody, along the lines of Gunlogson (2008) seems like a better approach to take.

Farkas and Roelofsen also discuss the conventions of use, or tabling, model that they propose for these constructions. A basic discourse context is a triple of *participants*, the set of discourse participants; *Table*, corresponding to Ginzburg’s QUD, and *commitments*, a function from every participant  $x$  to the set of possibilities that  $x$  is publicly committed to. This is enough, they argue, to deal with canonical declaratives and questions, but that to deal with ‘marked’ form (e.g. rising declaratives and tag questions) they add an additional component  $evidence_x$ . *Evidence* includes a list of pairs  $\langle p, i \rangle$  that  $x$  claims to have evidence for, where  $p$  is a possibility and  $i$  is a ‘credence level’ indicating the level of belief that the speaker has in  $p$  based on the evidence.

Rising declaratives (with rising intonation), then, indicate [zero, low] credence; rising intonation tags indicate [moderate, high] credence and falling tags indicate [high] credence. The credence levels are argued to arise purely from the intonation.

Farkas and Roelofsen present a large number of examples that they believe support their analysis; I believe, however, that their analysis is too broad and suffers from not taking account of the relationship with the addressee (e.g. through contingency). Their primary reason for ruling out a contingency-based analysis is rising declarative examples like their example (55) (shown here as (253)):

(253) Student:       The answer to this problem is 5 because the square root of 9 is 2



and  $2+3$  is 5.

Teacher: The square root of 9 is 2?

Farkas and Roelofsen argue that a contingency analysis cannot hold here because the teacher's belief of  $p$  is not conditional on the student's response: the teacher knows that the square root of 9 is not 2. They rule out a situation of *pretence* for two reasons: firstly, they question why tag questions are unable to be coerced into this context, if pretence is available with rising declaratives in this context. However, I think this is easily accounted for by the analysis I have presented above: in a tag question, the speaker has a belief of  $p$  that they are willing to take responsibility for (and which they *do* take responsibility for in the anchor of the tag). Whether or not the acceptance of that belief is contingent on the addressee relies on the intonation of the tag, but the speaker does make their own assertion and suggests that this assertion is the Known Answer to the tag question. In a rising declarative on the other hand, the speaker does not take any responsibility for  $p$  upfront. While they claim through the rising intonation that their commitment is contingent on the addressee, the addressee (here, the student) has *already* committed to  $p$  – the fact that the teacher is thus questioning that commitment leads the student towards the conclusion that the square root of 9 must not be 2. This accounts for the usage of the rising declarative in example (253) and rules out the use of the tag question.

The authors' other point is the use of rising declaratives in contexts like examples (254) and (255) – in each case, the parent is reported to have low credence in the proposition despite the evidence in favour of  $p$ :

(254) Context: *Mother sees child putting on football boots.*

Mother: What? You are going to play soccer? No way! You are staying home and doing your homework.

(255) Context: *Father asks his child to set the table. The child does a particularly bad job of it but appears to consider the job finished.*

Father: This table is set? Where are the wine glasses? Where are the napkins?

(Farkas and Roelofsen 2017:276)

However, I believe these can be accounted for in a similar way to the teacher example: in each case, the child has committed (through putting on their boots, or presumably leaving the table), indicating that they believe they are going to play football, or that they have finished setting the table. The parent does not take

responsibility for *p* in either case, but leaves it contingent on the child – given that the child in each case has already committed, this again leads to the conclusion that their behaviour needs to be questioned, especially by someone in authority like a teacher or parent.

In terms of the difference between rising and falling tag questions, Farkas and Roelofsen discuss a couple of examples that it is worth considering. Firstly, the examples presented in (256) and (257). The authors argue that both rising and falling tags are possible, given that the speaker has high credence of belief in the evidence for *p*:

(256) *Belinda and Chris are looking at a sunset. Belinda says to Chris:*

This is a beautiful sunset, ↗isn't it? / ↘isn't it?

(257) *Amalia and Bert have a colleague, Carla, who is admired by everyone for her problem solving skills. One day at a department meeting, the chair raises an issue, and Carla immediately finds a solution that makes everyone happy. Amalia says to Bert:*

She always finds a solution that makes everyone happy, ↗doesn't she? / ↘doesn't she?

(Farkas and Roelofsen 2017:273-274)

While both are interpretable and acceptable, this does not account for the fact that tags with falling intonation are *preferred* in these situations where the speaker has a strong belief of *p* (Ladd 1981, Reese and Asher 2006). In Farkas and Roelofsen's evidential model either tag question should be able to be used with equal probability in these positive contexts because both are available in [high] credence contexts. The correct distribution can be established through the analysis I posit above along with a pragmatic understanding of contexts of use: if the speaker is not challenged by some contextual evidence, there is no need for them to make their commitment contingent, and so falling intonation will be preferred in production.

There are some positives to Farkas and Roelofsen's analysis: namely, the idea of *credence levels*, which I will return to in chapter 5, and the fact that the varying intonation on the tag question does not appear to truly rule out any uses. However, I don't believe that their reasons for ruling out a more pragmatic analysis of the intonation like that of Gunlogson (2008) are justified; furthermore, the analysis is entirely egocentric and does not involve any acknowledgment of the relationship between the speaker and addressee. I don't believe that Farkas and Roelofsen's table model for non-canonical questions is necessarily

*incorrect*, but it is too broad.

### **Malamud and Stephenson 2014**

Malamud and Stephenson (2014) extend Farkas and Bruce's (2010) model of dialogue to account for three types of constructions: rising declaratives, same polarity tags and reverse polarity tags with rising intonation in four contexts. The contexts are labelled 'unsure of move' (258), 'seeking agreement' (259), 'blushing/innuendo' (260) and 'borderline paint' (261). I will only discuss the distribution and analysis that they present for rising reverse polarity tags and rising declaratives<sup>55</sup>.

(258) *B hasn't met A's neighbour and asks 'What do you think of your new neighbour?'*

*A isn't sure if B wants to know about neighbourliness or suitability for dating. A replies:*

# He's attractive, ↗isn't he?

He's attractive?

(259) *A and B are discussing various traits of their mutual acquaintances. B says 'I think Bill, more than anything else, is just a really nice guy'. A replies:*

He's attractive too, ↗isn't he?

# He's attractive too?

(260) *A and B are gossiping. A doesn't know anything about B's new neighbour. B says blushing, 'You've got to see this picture of my new neighbour!'. Without looking, A replies:*

# He's attractive, ↗isn't he?

He's attractive?

(261) *A and B are sorting paint cans in a store into a 'red' bin and an 'orange' bin. B points to orangish-red paint and says 'What colour would you say this is?'. A replies:*

It's red, ↗isn't it?

It's red?

(all from Malamud and Stephenson 2014)

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<sup>55</sup>In all of the contexts where 'rising declaratives' are available, it could be argued that these are in fact closer to cases of uptalk or uncertainty rather than being questioning declaratives. Farkas and Roelofsen (2017), for example, acknowledge these uptalk/uncertain of move contexts but argue that they should be handled separately. I agree with Farkas and Roelofsen's position: none of these contexts have the same belief conditions as the true rising declarative questions discussed by Gunlogson (2003, 2008) and Farkas and Roelofsen (2017).

Malamud and Stephenson's work extends Farkas and Bruce (2010), who develop a framework for dialogue whereby each conversation participant has their own set of discourse commitments ( $DC_x$ ) as well as the Table (equivalent to Ginzburg's QUD), CG, and the projected CG. When a speaker produces an assertion, the assertion is added to their DC as well as to the Table and to the projected CG. When the addressee accepts the assertion, it is also added to their DC and can be 'popped' from the stack on the Table (i.e. downdated from QUD) and becomes part of CG. A proposition that is in each conversation participant's DC will automatically be added to CG.

In order to account for the distributions of rising declaratives, same polarity tags and reverse polarity tags with rising intonation in across the four contexts, Malamud and Stephenson posit that as well as participants' discourse commitments  $DC_x$ , each participant also has a set of *projected discourse commitments* which they are not yet committed to.

For a reverse polarity tag in a case like example (261) Malamud and Stephenson (2014) argue that  $p$  is added to the Table. Furthermore, it is added to the projected CG as well as to the speaker's projected DC. It is not added to the addressee's projected commitments, nor to any DCs or the CG.

It is possible that the CHECK move could be accounted for Malamud and Stephenson's (2014) framework:  $p$  would be added to the speaker's DC and to the addressee's projected DC set. However, this does not account for the prior beliefs that precondition the use of the CHECK move; furthermore, the idea of projected discourse commitments can be accounted for with a simple QUD/Table model (as discussed above).

More generally I believe there are issues with Malamud and Stephenson's account. Firstly, they argue against a compositional account of the contribution of the different parts of the construction to the meaning, rather treating each one as an individual unit. As I have shown above, there is reason not to treat e.g. reverse polarity tag questions and their anchors as complex speech acts.

Secondly, from a dialogue perspective, I am not convinced of the necessity of projected DCs. By virtue of putting a proposition  $p$  on the Table (or in the QUD), the speaker is projecting that  $p$  is something they would like to commit to; similarly, that it should be entered into the shared ground between the conversation participants. Further, Malamud and Stephenson's analysis of rising declaratives suggests that the speaker is projecting a commitment on behalf of the addressee without considering their own engagement with or belief in the proposition, even at the Table level. While I do not agree that conversation is entirely egocentric, I certainly believe that the speaker takes

their own beliefs and perspective into account. So, while Malamud and Stephenson's analysis has some benefits over Farkas and Roelofsen's account in terms of taking the speaker-addressee relationship into account, I believe that a Ginzburg style dialogue model combined with a pragmatic understanding of intonation following Gunlogson is able to deal with the data in the most adequate way.

### 4.3.6 Summary

In this section I took the evidence from the pragmatic distribution of the *-n* and *-int* particles seen in section 4.2 in order to establish a meaning for the particles. I argued that although these particles appear to be related to the negation seen in biased questions, it is more relevant to relate the meaning to particles that have been variously labelled 'checks', 'confirmational', 'acknowledgments' and 'align moves' in the literature. I thus argued that *-int* and *-n* are CHECK moves, which I defined using the framework for the semantics of interaction developed by Ginzburg (2012), while also arguing that Ginzburg's definition of 'check' moves, while the most inclusive of all the available definitions, was not specific enough to encapsulate the nuanced relationships of speaker and addressee beliefs and biases that these sorts of moves must take into account.

I posited that in order to use the CHECK move, speakers must believe that  $p$  is part of the addressee's existing beliefs; that  $p \in \text{SP}(a)$  is also added to the QUD as not-at-issue content. When the addressee accepts the proposition, they also accept the not-at-issue content (i.e. that they already believed  $p$ ); this is added to the speaker's FACTS set, providing further evidence for the need for conversation participants to have individual interpretations of the shared ground rather than an abstract Common Ground that all shared information is added to.

I also posited a domain within FACTS, RecentFACTS. This redefines the FACTS domain as a partially ordered set, and allowed me to account for the fact that CHECK moves can be used to highlight and re-establish information that is already assumed to be in the shared ground from earlier in the same conversation, without requiring that conversation participants keep track of who is committed to what at all times.

I compared this analysis of the Scots CHECK moves with an analysis of standard English tag questions, which I argue are not CHECK moves, but rather defective questions. Building on the analysis given in Reese and Asher (2006) by separating the contributions of the syntax and intonation, I argued that the Known Answer analysis of tag questions is the right way to account for all instances of nuclear tag questions, with the contribution

of rising intonation as introducing *contingency* (Gunlogson 2008). Finally, I compared this to the accounts of tag questions put forward by Farkas and Roelofsen (2017) and Malamud and Stephenson (2014). While both accounts have their positives, I argued that neither approach was able to fully account for the belief and bias combinations required to get an accurate distribution of tag questions, and that the compositional approach I have established here is better in that respect.

I will now move on to the final piece of the analysis for *-int* and *-n*: the syntactic distribution of the particles.

## 4.4 The syntax of *-n* and *-int*

### 4.4.1 Introduction

The final part of the puzzle that needs to be addressed is the syntax of the *-int* and *-n* particles. As we have seen, superficially, these particles look like negative markers, and appear in places where standard English has negative markers. In the previous section I argued that semantically, these markers were not negation, but instead what I termed CHECK moves. This does not necessarily mean they are not *syntactically* negation. For example, Romero's (2015) analysis of biased question negation argues that the negation is not true negation, but a FALSUM marker – nevertheless, syntactically, this is taken to be in NegP. I will therefore firstly consider whether a NegP account is a plausible analysis for the *-int* and *-n* markers, looking at both Thoms et al. (2013) and Cormack and Smith (2012). However, I will instead argue in favour of positioning *-int* and *-n* in a conversation domain in the left periphery, based on the idea that speaker and addressee roles can be encoded in the syntax *when relevant* (Wiltschko 2014). This more accurately accounts for the syntactic distribution, and is in particular able to deal with tag questions on negative anchors well, utilising Sailor's (2011) VP-ellipsis analysis of tag questions.

### 4.4.2 Not in NegP

#### A brief overview of NegP

Following Pollock (1989), in the framework of generative syntax, negation is generally taken to be located in some sort of NegP position (Ouhalla 1991, Haegeman 1995, Zanuttini 1997, Rowlett 1998, Brown 1999, Zeijlstra 2004, Poletto 2015), or in a Pol(arity)P which has a [+neg] feature (Laka 1990, Holmberg 2013)<sup>56</sup>. Negative elements cross-linguistically are taken to be base generated here. Analyses vary as to whether negative elements are

generated in one NegP location and then moved, constrained by independently motivated syntactic/semantic reasons (Zeijlstra 2004, Poletto 2015), or whether there is a (possibly extensive) series of fixed NegP projections (Ouhalla 1991, Cinque 1999, Zanuttini 1997). These cartographic approaches to negation have been more popular for Romance languages, particularly Italian, where there are a range of negative markers, each seemingly in a different location syntactically.

In English, there is only *not* and its reduced form, *-n't*. However, there has still been considerable discussion about where these negative markers are generated. Pollock (1989) argues that English *-n't* and *not* are both in SpecNegP. Potsdam (1997) gives evidence from ellipsis and the Head Movement Constraint to show that *-n't* and *not* are in the head of NegP. Zeijlstra (2004) splits up the two elements and argues that *-n't* is a preverbal negative element that sits in the head of NegP, with *not* as an adverb in specifier position, raised from a vP adjunct. In the following discussion, whichever approach one wishes to take to the distribution within NegP of negation markers in English (and Scots) does not affect the analysis, and so I will not take any position here.

It is important firstly to consider whether the analysis that *-n* and *-int* are syntactically in NegP is a suitable one. They are, after all, phonologically similar to true negative markers, and they appear in locations where standard English has negative markers. I argued in section 4.3 that these particles are not semantically negation markers: but although e.g. biased question negation may behave differently in the syntax (e.g. by combining with the auxiliary and raising in standard English (compare (265) to (264)) (Domaneschi et al. 2017), or by not combining with indefinites in German (Büring and Gunlogson 2000, Domaneschi et al. 2017)), it is still taken to be generated in NegP. Indeed, for Romero and Han (2004) this is one of the peculiarities of biased questions – cross-linguistically, why is it so often negation that carries out this role of indicating bias in questions?

We know that the distribution of *-int* and *-n* is limited to non-canonical questions, and not to any construction which actually involves an expression of negation – so, not available in negative declarative or imperatives, or in truly negative questions (see chapter 3 for a full distribution). Syntactically, we also saw that *-int* and *-n* do not license negative polarity items, a general feature of syntactic negation, while they do not anti-license PPIs.

(262) Can'n Jenny come too/\*either? (Shetland)

(263) Dint they have bread too/\*either? (Glasgow)

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<sup>56</sup>I will refer to NegP throughout, but what I discuss would also be applicable to a PolP analysis.

However, this fact is not enough to claim that the markers are not, syntactically, negation. Negation in biased questions famously does not anti-license PPIs (Ladd 1981). In (264) we have an example of true negative question, which licenses NPIs, and in (265) we have a biased question which does not.

(264) Is Jane not coming either/\*too?

(265) Isn't Jane coming too/\*either? (standard English)

So it is very much possible that these particles could still be in NegP, despite not having traditional negative properties.

There have been two relevant theoretical analyses of Scots negation, both of which consider particles like the two examined in this thesis to be negation. Firstly, Thoms et al. (2013) look to analyse Scots negation patterns (including Glasgow Scots particle *-int*) in a framework of extended projections (Grimshaw 2005). I will firstly argue against this position, focusing on evidence from biased questions and tag questions, as well as further evidence from subject *wh*-questions. I will then turn to consider Cormack and Smith's (2012) proposal for Scots negation that takes a more cartographic approach, using the question data presented in Millar and Brown (1979), presented in chapter 2 and repeated here.

(266) \*Isnae he coming?

(267) Isn't he coming? (Edinburgh, Millar and Brown 1979:29)

While I will argue that Cormack and Smith's proposal is a step in the right direction, I will conclude that it is not the best analysis for the data, again focusing on the distinctions we see between biased questions and tag questions.

### **Thoms et al. 2013**

Thoms et al. (2013) explore negation in Scots more broadly, presenting a rich set of data from primarily Glasgow and Fife varieties of Scots. They argue that the richness of the data merits a model of the data that follows the extended projections framework developed by Grimshaw (2005), and 'spans' (Svenonius 2012).

In this framework, a clause is modelled as an extended projection of the lexical verb. Positions are not related through head movement, as is standard in generative syntax, but by being part of the same extended projection. An extended projection consists of a lexical head, like N or V, and the functional projections that associate with it (Grimshaw 2005) –



for example, D is the functional projection that associates with N – and a span is a sequence of heads within an extended projection. Spellout rules are determined by a ‘diacritic’ which associates with a particular head within a span. This ‘diacritic’ acts in some ways like an EPP feature, but rather than forcing movement, the diacritic purely states that the head that hosts it is the point of lexical realisation for the information contained in the span.

This framework requires an extensive range of C heads which are specified for particular speech acts.

For example, Thoms et al. claim that an interrogative C in standard English has a specific  $C_{\text{interr}}$  head which has C+T+Neg in its span, and then spells out *aux + -n't* in C. In Scots, Thoms et al. argue that this does not happen: there is no rule for C+T+Neg to spell out together in C with a  $C_{\text{interr}}$  head in the variety. This blocks *-nae* from appearing in C, and thus rules out examples like (266), above.

(268) EP for  $C_{\text{interr}}$ :  $C_{\text{interr}}+T+Neg \longrightarrow \text{aux}+n't$  in C [English]

(269) EP for  $C_{\text{interr}}$ :  $C_{\text{interr}}+T+Neg \longrightarrow \text{aux}$  in C [Scots]

I believe this analysis has problems, however.

The first issue, which is most pertinent for this research, is that Thoms et al. (2013) posit a separate  $C_{\text{tag}}$  for tag questions. Theoretically, there does not seem to be any reason to suggest that tag questions (in standard English) require a different syntactic structure to other types of interrogatives. Sailor (2011) presents a comprehensive analysis of canonical tag questions cross-linguistically, arguing that canonical tag questions are VP-ellided versions of matrix interrogatives.

Sailor uses Lobeck’s (1995) licensing conditions for VP-ellipsis to show that English canonical tag questions exhibit the same properties as regular VP-ellipsis with regard to the availability of auxiliary stranding – for example, not permitting stranding of progressive *be*, as in (270-273).

(270) Our hot dog vendor is being arrested, but our gyro guy isn’t [~~being arrested~~].

(271) \*Our hot dog vendor is being arrested, but our gyro guy isn’t being [~~arrested~~].

(272) Our hot dog vendor is being arrested, isn’t he [~~being arrested~~]?

(273) \*Our hot dog vendor is being arrested, isn’t he being [~~arrested~~]? (Sailor 2011:30)

Further, tag questions do not challenge Lobeck’s proposal that VP-ellipsis must be locally c-commanded by a T or Neg head.

(274) Mary didn't leave, although others \*(did) [~~leave~~].

(275) Mary didn't leave, \*(did) she [~~leave~~]?

(276) Joy washes her hands before dinner, but George does **not** [~~wash his hands before dinner~~].

(277) George washes his hands before dinner, does he **not** [~~wash his hands before dinner~~]?

(Sailor 2011:31)

Using evidence from a typological study, Sailor goes on to show that there is a one-way implicational relationship between VP-ellipsis and canonical tags: if a language has canonical tag questions, it also has VP-ellipsis<sup>57</sup>. The way in which tag questions are formed in the language furthermore depends on the properties of stranding that the language in question permits with regard to its VP-ellipsis. For example, while English, Danish and Taiwanese have auxiliary stranding preceding VP-ellipsis and thus auxiliary stranding in tag questions, some languages such as Persian, Samoan and Scottish Gaelic have V stranding in VP-ellipsis contexts (see (278) from Persian). These languages subsequently have V stranding in tag questions (279-280).

(278) *Naysan ketaab-ro ba deghat khoond, Nasim ham khoond*  
Naysan book.OBJ with caution read Nasim also read  
'Naysan read the book carefully and Nasim also read the book carefully.'

(Persian, Sailor 2011:66)

(279) *Naysan ketaab-o khoond, na-khoond?*  
Naysan book.OBJ read NEG.read  
'Naysan read the book, didn't he?'

(280) *Naysan ketaab-o na-khoond, khoond?*  
Naysan book.OBJ NEG.read read

'Naysan didn't read the book, did he?'

(Persian, Sailor 2011:65)

Sailor thus provides an analysis of canonical tag questions which formalises the long-held intuition that canonical tags are elided versions of matrix questions, which has been previously discussed in this thesis. Specifically, he suggests that these are elided forms of matrix biased questions, highlighting Romero and Han (2004) for discussion, and stating that '*any progress toward answering these more general questions [of how bias is derived from negation and interrogation] will therefore have direct implications for the theory of tag questions*' (Sailor 2011:17).

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<sup>57</sup>A language can have VP-ellipsis without having canonical tag questions. Sailor (2011:81) cites Hebrew, Swahili, Vietnamese and Malagasy.

Back to Thoms et al.’s framework, then, to posit a separate C head for tag questions does not allow us to maintain this syntactic relationship between tags and matrix biased questions, instead requiring that tag questions are their own type of speech act requiring a specific C head. While some authors (Krifka 2015, Farkas and Roelofsen 2017) have argued that biased questions and tag questions are different speech acts from ordinary questions (e.g. that they are something like a REQUEST•ASSERT), they have still maintained the relationship between matrix biased questions and canonical tags. So, although there may be tricky data to deal with in Scots regarding the presence of e.g. *-int* in Glasgow Scots tags, this is not justification for arguing that tags in general are different speech acts with different rules. If Thoms et al. did not posit a separate Force head for tag questions, they would not be able to deal with the distribution of the data, as *-int* is unavailable in matrix biased questions. Furthermore, this separate speech act proposal is redundant for standard English, where the rule would be identical for matrix (biased) interrogatives and tags.

(281) EP for  $C_{\text{interr}}$ :  $C_{\text{interr}}+T+\text{Neg} \longrightarrow \text{aux}+-n't$  in C

(282) EP for  $C_{\text{tag}}$ :  $C_{\text{interr}}+T+\text{Neg} \longrightarrow \text{aux}+-n't$  in C

Note also that Thoms et al.’s framework cannot deal with the variation in negation patterns established by Domaneschi et al. (2017), where *-n't* negation is preferred with biased questions, and low *not* negation is preferred with true negative questions (again without adding a separate biased interrogative C head).

Similarly, while the relationship between polar rhetorical questions and interrogative exclamatives has not been extensively formalised, to posit a head for exclamatives separate from rhetorical questions – as Thoms et al. do – ignores work which makes the claim that one is a sort of the other (Zanutini and Portner 2003, Delfitto and Fiorin 2014). This particular issue is admittedly less important for the Scots data because, as we saw in chapter 3, there was acceptability of *-int* and *-n* in both polar rhetorical questions and exclamatives, and thus the notion that they are the same construction could be maintained through one head. However, throughout the results presented in this paper, it seems as though – as has been posited for biased questions and tag questions, or for rhetorical questions and exclamatives – there are connections between all of these non-canonical question constructions which should be explored, rather than attempting to cleave them apart. Indeed, Thoms et al. hint at that themselves when they present the questions ‘*why do exclamatives and tags have the same form in C [in Scots]?*’ and ‘*why does standard English realise negation in C in the same way in almost all cases?*’ (2013:22). The interrelatedness

of the data and the subsequent proliferation of ‘different’ contexts that the spanning model gives rise to in respect of that (for example, in standard English) should be cause for concern.

Furthermore, there is evidence that *-n* and *-int* are not base generated in a middlefield, negative polarity position, due to their possibility of co-occurring with lower negation.

(283) People *widnae* understand that, *wint* they *no*? (attested, Glasgow)

(284) Do’n they *no* have a bakery in *Waas*? (attested, Shetland)

In an example like (283), again following the VP-ellipsis analysis of tag questions, the *no* in the *wint they no* tag must be the head of NegP given Lobeck’s licensing conditions for VP-ellipsis – this lower *no* cannot be a constituent negation within VP. Similarly, in (284), the particle *-n* acts together with the lower *no* to give one biased question meaning – it is not the case that there is simply one negative position in the span that can give you all the required flexibility for non-canonical questions with negation in Scots.

Outwith the realm of non-canonical questions, there are other problems with Thoms et al.’s analysis. Firstly, their generalisation that *-nae* cannot be realised in C in interrogatives due to the fact that the  $C_{\text{interr}}$  head does not spell out C+T+Neg in Scots as *aux+nae* in C. While this seems to be generally true for polar interrogatives and object *wh*-questions, the lack of spell out of negation in C in questions in Scots arguably does not apply to subject *wh*-questions.

(285) **Wha didna** love *dy midder*?  
 who didn’t love your mother  
 ‘Who didn’t love your mother?’  
 (Shetland, from *Aert-fast* by Jacqueline Clark, 2012)

(286) Andy: You hearing of any spares for Pittodrie? Could do with one.  
 J: Nothing as yet mate. Asking the usuals. **Who didny**<sup>58</sup>get? We got 2 kids tickets off celtic. (Glasgow, *jsstarryplough*, 2017)

(285) is an example of a rhetorical subject *wh*-question in response to the question ‘but did you love my mother too?’, while (286) is clearly a true information-seeking *wh*-question, asking which of Andy’s acquaintances did not get tickets for the game at Pittodrie. Andy subsequently answers that it was his dad who did not get a ticket.

<sup>58</sup>Although the literature generally transcribes Central Scots [ne] negation as *-nae*, as I have done throughout this thesis, Scottish Twitter users generally transcribe the sound as *-ny*.

Thoms et al. (2013), following Brown and Millar (1980), suggest that *aux+nae* in C might be a feature of rural Scots dialects. It is therefore worth noting that although (285) comes from a play written in Shetland dialect and so is certainly rural and could be seen as more ‘archaic’ Scots, (286) comes from a (young) male Twitter user in Glasgow in 2017 – neither rural nor archaic.

Participants in this research also rated examples of subject *wh*-questions with *-na(e)* highly<sup>59</sup>. For example, in Shetland, 81.25% (N=65) of information-seeking subject *wh*-questions with incorporated *-na* negation were rated 5, with the other 18.25% (N=15) were rated 4. 77.5% (N=62) of equivalent *-nae* constructions in Glasgow were also rated 5, with only two 1 or 2 ratings. Clearly, (285) and (286) are not exceptions to a rule.

Subject/non-subject asymmetries of this sort are not uncommon: there is of course a noted (den Besten 1983, Koopman 1983) subject/non-subject asymmetry in *wh*-questions in English (and Scots), whereby positive object *wh*-questions obligatorily have auxiliary verbs which move to C, and positive subject *wh*-questions do not require auxiliaries and thus do not trigger *do*-support like object *wh*-questions.

(287) Who<sub>i</sub> did he give the present to t<sub>i</sub>?

(288) Who bought a present?

(289) \*Who did buy a present?<sup>60</sup>

There have been subsequent arguments made that the *aux(+neg)* in *wh*-subject questions is not spelled out in C, but rather in T. This could save Thoms et al.’s generalisation. Pesetsky and Torrego (2001), for example, argue that nominative case is a *uT* feature on the determiner D. C has both a *uT* and a *uWh* feature in a question. In object *wh*-questions, the subject in T has the *uT* feature, but no *uWh*. The object *does* have a *uWh* feature. Two separate movement operations must therefore take place in order to check the two uninterpretable features on C, as in (290). Note that *do*-support is also triggered to check *uT*.

(290) What did Mary buy?

[<sub>CP</sub> C<sub>uT, uWh</sub> [<sub>TP</sub> [Mary<sub>uT</sub>] T [<sub>VP</sub> bought what<sub>uWh</sub> ]]] →

<sup>59</sup>Object *wh*-questions were not tested with *-na(e)* but rather with verb-subject-*no* constructions; 78.75% (N=63) of those examples were rated 5 by participants in Shetland, and 80.52% (N=62) by participants in Glasgow, indicating that *-na(e)* is the standard construction for subject *wh*-questions in comparison to verb-subject-*no* in object *wh*-questions.

<sup>60</sup>This example is fine if *did* has focus stress. Pesetsky and Torrego (2001) point out that the addition of focus *do*-support is independent of *wh*-movement, appearing in assertions, for example, and thus it is not relevant for the overall picture of subject/object *wh*-asymmetry.

[<sub>CP</sub> [<sub>what</sub><sub>*uWh*</sub>] <sub>did</sub><sub>*uT*</sub> [<sub>TP</sub> [<sub>Mary</sub><sub>*uT*</sub>] ~~did~~ [<sub>VP</sub> buy ~~what~~ ]]

In subject *wh*-questions, however, the subject in T carries both *uT* and *uWh* features. Movement of the subject to C is enough to check both features and thus there is no need for an auxiliary verb in T to move to C, or for *do*-support to be generated.

(291) Who bought the book?

[<sub>CP</sub> <sub>*C*</sub><sub>*uT*</sub> <sub>*uWh*</sub> [<sub>TP</sub> [<sub>who</sub><sub>*uT*</sub>, <sub>*uWh*</sub>] T [<sub>VP</sub> bought the book ]] →  
 [<sub>CP</sub> [<sub>who</sub><sub>*uWh*</sub><sub>*uT*</sub>] [<sub>TP</sub> [~~who~~] T [<sub>VP</sub> bought the book ]]

So, Thoms et al. could argue that the evidence from subject *wh*-questions does not provide a counter argument to the generalisation that negation cannot be realised in C in Scots – it may well be that in subject *wh*-questions, negation is realised on T.

However, it would not be possible to implement this in Thoms et al.'s 'spanning' approach without stating that there must be a separate C head specifically for subject *wh*-questions, which stipulated that when there was a *C<sub>subjwhq</sub>* head, the spell out rule for the extended projection would be:

(292) *C<sub>subjwhq</sub>*+T+Neg → aux+neg in T.

This is not impossible, but there is one obvious issue. While there could perhaps be arguments made for separate C heads for polar interrogatives and *wh*-interrogatives, or perhaps for rhetorical questions and information-seeking questions, it is difficult to see a justification for treating subject and object *wh*-questions as different at the speech act level, even taking account of the subject/non-subject asymmetries in their behaviour.

Both subject and object *wh*-questions semantically denote the set of possible answers, and request that the addressee makes public which of these answers holds and therefore how the set of possible worlds in the Common Ground should be restricted (Groenendijk and Stokhof 1984). While syntactically, their form might vary, the constructions are not fundamentally different at a speech act level. Therefore, an analysis like Pesetsky and Torrego's (2001) approach, which retains the notion that these are the same type of construction but with different positioning of features seems preferable – retaining the singular speech act idea. This can deal with the asymmetry in auxiliary generation in standard English – as well as the difference in availability of *-na(e)* in Scots object vs subject *wh*-questions: *-nae* does not appear in C in interrogatives in Scots varieties, but verbs in subject *wh*-questions are not in C, and therefore are not subject to this constraint.

In summary, then, Thoms et al.'s (2013) analysis for the Scots negation data is extremely flexible. They argue that the variation in the data warrants this level of flexibility. However, their analysis requires drawing arbitrary lines as to what speech acts are deserving of syntactic heads, as we saw for biased questions and tag questions, rhetorical questions and exclamatives, and object and subject *wh*-questions. The analysis does not have strong predictive power, and leads to the potential for serious redundancy as we saw in the biased question/tag question case in standard English. I believe there are better analyses for the problematic Scots data than the extended projection analysis suggested by Thoms et al., which do not run into these problems. Before I move on to my proposed analysis, I will first consider the alternative analysis for Scots negation put forward by Cormack and Smith (2012).

### **Cormack and Smith 2012**

Cormack and Smith (2012) propose a cartographic style analysis for English negation. The authors start by looking at standard English negation, and posit not just one but three negation positions in English: AdvNEG, which scopes over only vP and is effectively constituent negation; PolNEG, which acts like Laka's (1990) polarity phrase and functions as clausal negation; and EchoNEG, which is in C and performs 'metalinguistic negation'. They state that only *not* can be AdvNEG, only *-n't* can be EchoNEG, and either *-n't* or *not* can be in PolNEG (see Figure 4.3).

Cormack and Smith (2012) subsequently extend this cartography to Scots negation. Similarly to standard English, they argue *no* is in AdvNEG for constituent negation, while *-nae* or *no* can be in PolNEG to contribute clausal negation. Most interestingly, they suggest that *-n't* is in EchoNEG in Scots. This is based on the work of Brown and Millar (1980) and Millar and Brown (1979) who note that while *-nae* cannot be used in questions, *-n't* can (see (266-267)). The tree for this distribution can be seen in Figure 4.4.

Cormack and Smith's analysis seems at first promising in that it recognises a distinction between the role of something like *-n't* in Scots (or *-n*, or *-int*), which is available in some interrogatives, in that it is not situated in a main, polarising NegP. However, this analysis has some major weaknesses.

The first is the conceptualisation of EchoNEG as a position for *metalinguistic negation* in general. Metalinguistic negation is a '*formally negative utterance*', so, one which contains a negation marker and appears on the surface to be a negative proposition, '*which is used to object to a previous utterance on any grounds whatsoever*'

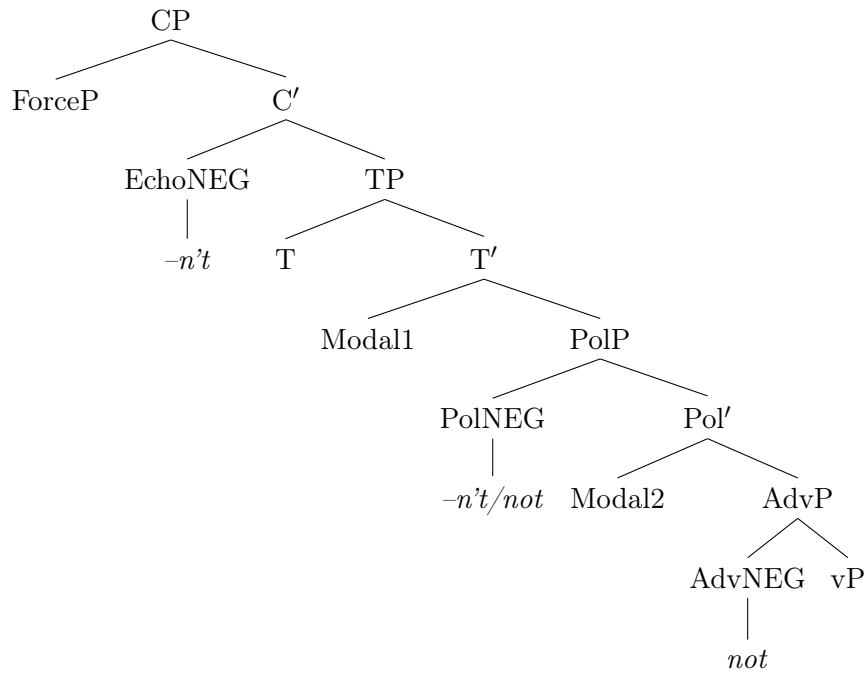


Figure 4.3: Cartography of English negation posited by Cormack and Smith (2012).

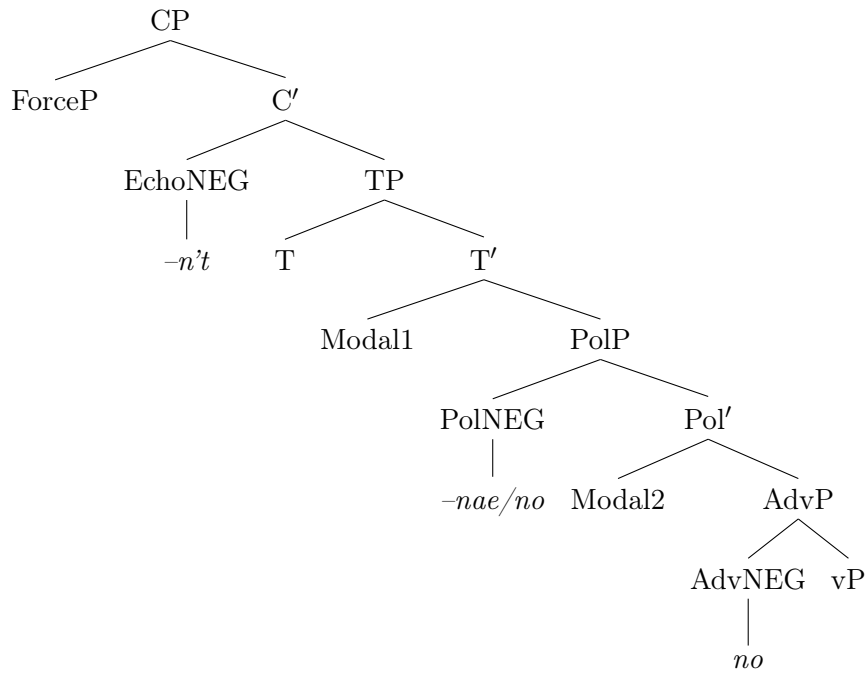


Figure 4.4: Cartography of Scots negation posited by Cormack and Smith (2012).



(Horn 1989:374). Metalinguistic negation could, for example, be used to correct a pronunciation, as in (293). Alternatively, it could be used to correct the focus of a proposition, as in (294), or to provide some contradiction and ‘a more exact indication of the focus of negation’ (Horn 1989:371), as in (295).

(293) It’s not your pro[noun]ciation you need to work on – it’s your pro[nʌn]ciation.

(294) I’m not *his* brother – he’s *my* brother!

(295) *Some* men aren’t chauvinists – *all* men are chauvinists!

(examples from Horn 1989)

These instances of metalinguistic negation in Scots all accept  $-na(e)$ ; for example (296).

(296) Mozart’s sonatas **wirna** for violin and piano, they were for piano and violin.

To argue that this EchoNEG is a position for ‘metalinguistic negation’ more broadly does not seem to be a good direction. However, could it be re-conceptualised as a position for ‘high negation’ that is specific to questions?

We could consider whether EchoNEG could be a high position for negation that was exclusively for some sort of biased question negation, like *FALSUM* markers (Romero 2015). At a base level, this is problematic as Cormack and Smith do not consider the more specific distribution of  $-n’t$  in non-canonical questions (rhetorical only (Tagliamonte and Smith 2002)); furthermore,  $-int$  and  $-n$  are also not available in these contexts.

Some have argued that the type of negation found in biased questions is not *FALSUM* but a type of true negation that denegates a speech act. For example, as mentioned in section 1.1.1, Krifka (2015) argues that the negation found in biased questions is a particular speech act operator. It embeds a ForceP that hosts *ASSERTION*, and is scoped over by a second ForceP which hosts *REQUEST*. It is this *REQUEST* operator that licenses the interrogative word order; speech act level *NegP* is not accessible without the inclusion of this *REQUEST* operator. The high negation subsequently acts to ‘denegate’ the lower *ASSERTION* force, asking the addressee if it is not this assertion that should be added to CG.

(297) S believes that there is a vegetarian restaurant nearby, but hasn’t seen it, and wants to ask A whether their belief is correct.

[<sub>ForceP</sub> *REQUEST* [<sub>NegP</sub> is<sub>i</sub>n’t [<sub>ForceP</sub> *ASSERTION* [<sub>TP</sub> there t<sub>i</sub> a vegetarian restaurant here]]]]

Krifka claims that this accounts for negation being syntactically high in biased questions, which does appear to be common cross-linguistically. However, in chapter 1 I discussed the fact that this is not the case in all languages, e.g. Japanese. Scots is like Japanese in that negation remains in low position in matrix biased questions. This is especially noticeable in Glasgow Scots, where high ‘negation’ *-int* is not at all available in biased questions but verb-subject-*no* is – clearly, negation is not syntactically high in the verb-subject-*no* construction.

Furthermore, Krifka’s analysis is designed for matrix biased questions, with canonical tag questions a subset of matrix biased questions. If biased questions are formed by a standard negation operator in a high NegP, denegating the assertion, the same should be true of tag questions. But as we saw in chapter 3, biased questions and tag questions have different forms in Glasgow Scots, and appear to be moving in that direction in Shetland dialect. Krifka’s analysis clearly cannot work, therefore, just for tag questions, exclamatives and rhetorical questions.

Furthermore, in section 4.2 I presented evidence that the contexts that permit tag questions (and exclamatives and rhetorical questions) are contexts in which the speaker is able to revise their commitment and add *p* to CG without any response or commitment from the addressee – the speaker is able to be an independent source for the commitment, in Gunlogson’s terms. I subsequently argued that there was no REQUEST force at play in *-n* or *-int* constructions (although standard English tags do retain this). Therefore, following a high NegP analysis of *-n* and *-int* in the style of Krifka would conflict with the semantic role of the CHECK move which does not require a REQUEST force.

The major problem, then, with positing any sort of high negation position syntactically for the Scots data is that these analyses are designed to deal with matrix biased questions. Tag questions have the same analysis; the problem posed by the Scots data is that matrix biased questions and tag questions diverge in their form, with *-int* available in tag questions but not biased questions, and *-n* the same for younger speakers in Shetland.

## Summary

In summary, neither Thoms et al. (2013) or Cormack and Smith (2012) are able to fully account for the distribution of Scots particles like *-n* and *-int* in certain non-canonical questions only, as seen in chapter 3. Thoms et al.’s account creates problems regarding how many individual speech acts and Force heads are required, while Cormack and

Smith’s analysis relies too heavily on the Scots particles being available in *all* non-canonical question contexts, and particularly on the relationship between biased questions and tag questions, to posit some sort of general ‘high negation’ position. As we saw in the distribution in chapter 3, it is not the case that *-int* and *-n* are generally available in non-canonical questions, and I thus posited that they were not specific non-canonical negation, but a CHECK markers.

In the next section, I thus argue that these particles, as well as *-n’t* in other Scots varieties (Brown and Millar 1980, Millar and Brown 1979, Tagliamonte and Smith 2002), should be given a syntactic analysis that is closer to something like *innit* – an invariant particle which developed from a canonical tag, but now has a range of distinct meanings (Anderson 2002). I will thus draw on the relationship between tag questions and confirmational particles, as I did in the semantic analysis in section 4.2, rather than the relationship between biased questions and tag questions. Specifically, I will situate these particles in GroundP in the left periphery, following the neo-performative syntactic framework of Wiltschko and Heim (2016).

#### 4.4.3 A neo-performative analysis: *-n* and *-int* in GroundP

##### Motivating a discourse domain

The idea of having speech act type material in the left periphery goes back to Ross (1970) and the ‘performative hypothesis’, in which a sentence’s illocutionary force is encoded in a performative verb at deep structure. Strong arguments were made against the idea of a ‘performative’ speech act layer in the syntax (Anderson 1971, Fraser 1974, Gazdar 1979), and the idea of encoding speech acts in syntax beyond a ForceP was not pursued frequently. However, based on evidence from discourse particles and vocatives, there have been some recent attempts to establish some sort of syntactic layer above CP that encodes the speaker/addressee relationship – for example, Speas and Tenny (2003) and Haegeman and Hill (2013) – based on evidence that syntactic phenomena can be seen occurring in this domain.

For example, Romanian is one of a number of languages (e.g. Bulgarian, Czech, Polish, Ukrainian, Georgian (Daniel and Spencer 2012)) which has a specific vocative case, indicating that case marking can take place in this extra-clausal domain.

(298) bare noun	singular vocative	plural vocative
<i>fată</i> ‘girl’	<i>fato</i>	<i>fetelor</i>
<i>băiat</i> ‘boy’	<i>băiate</i>	<i>băiaților</i>

There is evidence that particles – also outside of the main clause – can agree with vocatives in number or person (shown in (299-300) for Romanian), indicating that agreement can take place in this domain. In (299), *fetelor* is the vocative form for ‘girls’ which has the features [+feminine] and [+plural]. Given the [+plural] feature, the particle *lăsa* which simply calls for the addressees’ attention, must therefore take the second person plural ending *ți*. As seen in (300), *lăsa* itself would not be grammatical in this context. This agreement is interesting firstly because it is with the interlocutor(s), and secondly because the agreement is taking place entirely in the domain above CP.

(299) *Lăsați fetelor că plecăm.*  
 PART.2PL girls-the.VOC that go.1PL  
 ‘There, there, girls, we’ll be leaving’

(300) \**Lăsa fetelor că plecăm*  
 PART.2SG girls-the.VOC that go.1PL

(Romanian, Haegeman and Hill 2013:375)

Moreover, there are confirmational particles in Austrian German that inflect depending on the relationship between the speaker and the addressee, and whether the speaker would refer to the addressee with the formal second person pronoun *Sie* or with the informal second person pronoun *du*. Notably, this agreement is with the addressee and not with any individual mentioned in the anchor clause, as can be seen in (301) and (302) below – there is therefore no obvious connection to the proposition, but there is evidence of agreement in the discourse domain.

(301) *Ea hot an neichn Hund, goi?*  
 he has a new dog CONF.2INF  
 ‘He has a new dog, right?’

(302) *Ea hot an neichn Hund, goi-ns?*  
 he has a new dog CONF.2FOR  
 ‘He has a new dog, right?’

(Austrian German, Wiltschko and Heim 2016:14)

Allocutive agreement, for example in Basque, also involves particles agreeing with the addressee – this time, for gender.

(303) *Pette-k lan egin di-k*  
 Peter-ERG worked 3.ERG-MASC  
 ‘Peter worked’ (said to a male friend)

(304) *Pette-k lan egin di-n*  
 Peter-ERG worked 3.ERG-FEM  
 ‘Peter worked’ (said to a female friend) (Basque, Oyharcabal 1993:92 )

There is also evidence of ordering constraints in this domain, indicating that there is some syntactic structure (Haegeman and Hill 2013). In West Flemish, for example, particles *we* and *ze* can co-occur, but *we* must precede *ze*.

(305) *K’een gedoan (\*ze) we ze?*  
 I have finished PART PART PART  
 I’ve finished, y’know? (West Flemish, Haegeman and Hill 2013:375)

This evidence suggests that these particles and vocatives, which have often been considered pragmatic and outside of the syntactic domain, *should* be formalised in syntax. They have ordering restrictions, and can interact with things like case and agreement – syntactic phenomena. The question is how they should be formalised.

### **Wiltschko and Heim: an overview**

Wiltschko’s (2014) ‘Universal Spine Hypothesis’ centers on the premise that ‘*language-specific categories are constructed out of language-specific Units of Language and a limited set of universal categories*’ (2014:24). Units of Language include categories such as words and morphemes, as well as more abstract concepts such as features and clause types. Universal categories are projected on a universal spine which consists of four domains (a similar classification is found in Travis (2006) and further attributed to Ken Hale’s lectures at MIT, and a similar type of proposal with strong semantic connections for functional projections is made in Ramchand and Svenonius (2014)):

- *classification*, corresponding to the vP, where an event is classified;
- *point-of-view*, corresponding to AspP, where the reference time is introduced;
- *anchoring*, corresponding to IP, where the event is ‘anchored’ to the utterance;
- *linking*, corresponding to CP, which links the structure to a larger overarching structure

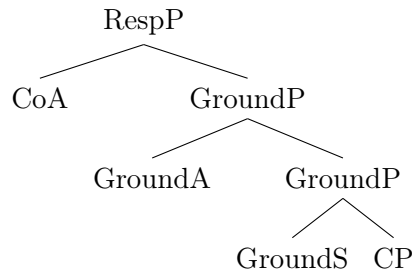


Figure 4.5: The conversation domain, as conceptualised by Wiltschko and Heim (2016).

Only as much of the syntactic spine as needs to be projected at any one time should be projected.

For example, an embedded small clause such as ‘Britney Spears perform in Las Vegas’ in ‘I saw Britney Spears perform in Las Vegas’ is a VP which does not require tense or aspect. It thus only projects VP (306). In regular tensed matrix clauses in English, IP must be projected (307); embedded complementiser clauses project CP (308).

(306) I saw [<sub>VP</sub> Britney Spears<sub>i</sub> [<sub>V'</sub> perform in Las Vegas ]]]

(307) [<sub>IP</sub> Britney Spears<sub>i</sub> [ I [<sub>VP</sub> t<sub>i</sub> [<sub>V'</sub> performs in Las Vegas]]]]

(308) I know [<sub>CP</sub> [<sub>C'</sub> that [<sub>IP</sub> Britney Spears<sub>i</sub> [ I [<sub>VP</sub> t<sub>i</sub> [<sub>V'</sub> performs in Las Vegas]]]]]]

Given this evidence that clauses ‘grow’ as necessitated by their linguistic context, Wiltschko and Heim (2016) argue that the clause can be extended further to include a ‘conversation domain’ above CP, which can be projected if/when a speaker wants to incorporate some specific speaker/addressee relationship or action syntactically, for example with a confirmational. This does not require a fully performative syntax like Ross’s (1970), but a domain that is invoked when required.

I will model the conversation domain in the same way as Wiltschko and Heim (2016), as seen in Figure 4.5 and detailed here.

There are two layers to the conversation domain. The lower layer, GroundP, encodes the speaker’s attitude towards the proposition, with the intention of ‘grounding’ it in the discourse (Clark and Brennan 1991), with ‘grounding’ equivalent to ‘adding to the Common Ground’.

The GroundP layer is separated into two projections: GroundS, which encodes the speaker’s own attitude towards the proposition, and GroundA, which encodes the speaker’s belief about the addressee’s attitude to the proposition. Wiltschko and Heim

justify separating these two perspectives syntactically based on evidence from e.g. Cantonese, where different particles encode specific meanings depending on the beliefs of the speaker or addressee. Lam (2014) argues that Cantonese *me1* particle is used when the speaker believes  $\neg p$  and wants to find out what the addressee thinks, while *ho2* is used when the speaker thinks the addressee believes  $p$  and wants to confirm this belief is true. The *me1* particle, therefore, is in the GroundS projection, while *ho2* is in GroundA. They claim that the fact that the particles sit in different projections comes from evidence that there are ordering restrictions when the particles co-occur, with *ho2* always occurring after *me1*<sup>61</sup>.

- (309) *Jimmy is the first of a long taxi queue. A taxi is coming, but someone not from the queue opens the door of the taxi saying loudly that he is in a hurry. Everyone in the queue is angry. Jimmy says this to the second person in the queue:*

*daai6 seng1 zau6 dak1 gaa3 laa3 me1 ho2 / \*ho2 me1*  
 loud voice then okay PRT PRT PRT PRT / PRT PRT  
 ‘What can one get by just by being loud?! I assume you’d agree it’s a valid question, right?’

(Cantonese, Lam 2014:64)

The authors argue that there is also evidence from English varieties that some particles can be situated either in GroundS and GroundA, depending on which perspective the speaker wants to encode. Canadian *eh*, for example, can be used to confirm the speaker’s belief of  $p$  (in GroundS), and also to confirm the speaker’s belief that the addressee knows  $p$  (in GroundA) – the latter case an instance where confirmational *right* or *huh* cannot be used.

- (310) Mary is walking her new dog when she runs into John. She is expecting that he would congratulate her on the new dog, but he’s not mentioning it. So she isn’t sure anymore whether he actually realizes that she got a new dog. So she utters:

**I have a new dog, eh/\*right/\*huh?**

(example from Wiltschko and Heim 2016:27)

The highest projection is ResponseP. Based on the idea of *call on addressee* (Beysade and Marandin 2006b), this projection encodes what the speaker wants the

<sup>61</sup>Further discussion with native Cantonese speakers, however, suggests that *ho2* and *me1* do not co-occur. There may be dialectal variation.

addressee to do with the proposition in order to complete the ‘grounding’ process. The evidence the authors present for separating ResponseP from GroundP comes from languages like Medumba, a Bantu language, which combines two particles in order to get the same meaning as e.g. Canadian *eh*. While *kula* marks the speaker’s propositional attitude, and is situated in the grounding layer, particle *a* signals that the proposition is up for question and the speaker wishes for the addressee to confirm *p*. This *a* particle associates with the CoA projection in ResponseP.

- (311) *kula u    γH    BH    swə a?*  
 PART 2.SG have dog new Q  
 ‘You have a new dog, eh?’ (Medumba, Wiltschko and Heim 2016:26)

In English, Wiltschko and Heim argue that the meaning of confirmation particles can be decomposed into the meaning of the particle itself, and the meaning of the intonation contour associated with the utterance. While the particles themselves (such as *right*, *eh* and *huh*) are in the ground projections, intonation sits in ResponseP.

It is worth at this point considering Wiltschko’s (2017) extension to Wiltschko and Heim (2016). Building on the Universal Spine Hypothesis, Wiltschko (2017) argues that the projections in the conversation domain are also ergative constructions, modelled as in Figure 4.6.

Within this framework, Wiltschko argues that standard declarative assertions project both Grounding and Response domains, indicating that the proposition is in the speaker’s set of beliefs (through the use of Ground-S as the external argument which has no lexical content) but requiring no further information to be given by any lexical item in any area of the conversation domain<sup>62</sup>.

Instead of positing that confirmational particles are in this grounding domain, Wiltschko instead argues that the particles are incorporated into ResponseP. The addressee is merged as an external argument with no lexical content in the RespsUBJ position. Rising intonation, marked with /, is encoded in the *resp* head. The particle itself, such as *huh* or *eh*, is in RespOBJ and ‘marks the utterance as the object of the requested response’. This can be seen in Figure 4.7.

Polar questions are argued to have the same structure as is presented in Figure 4.7 except without any RespOBJ position; Austrian German particle *jo* is taken to be an instance where the RespOBJ position is filled with no information in *respP* – *jo* marks out an utterance as a response without requesting any subsequent response.

<sup>62</sup>She does argue that falling intonation is in RespP – however, I discuss this claim regarding intonation in section 4.4.4.



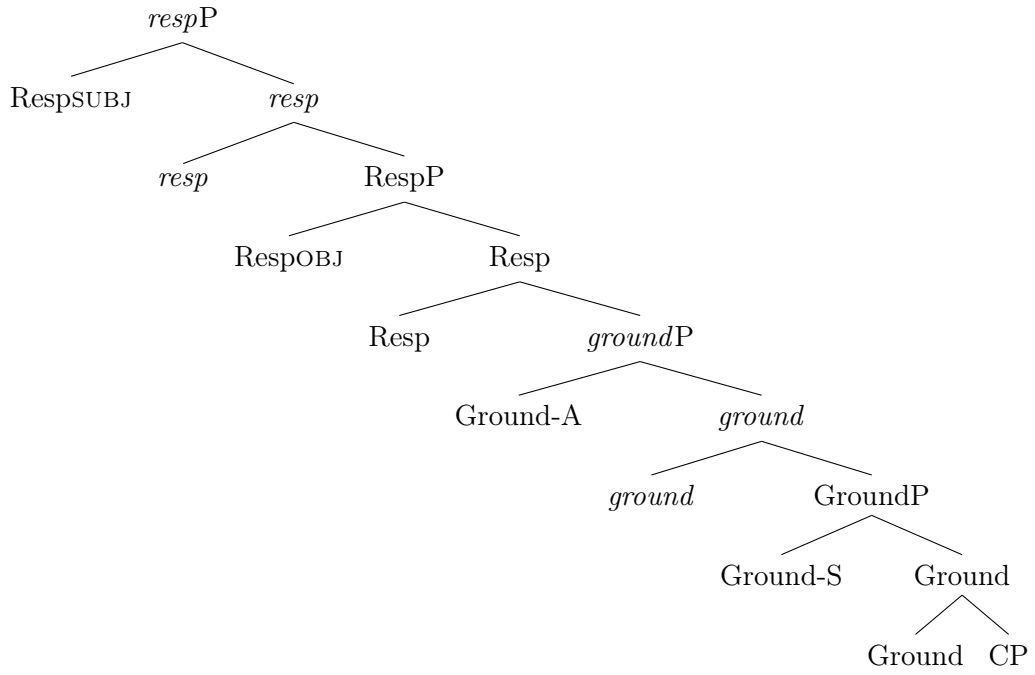


Figure 4.6: The ergative conversation domain, presented in Wiltschko (2017).

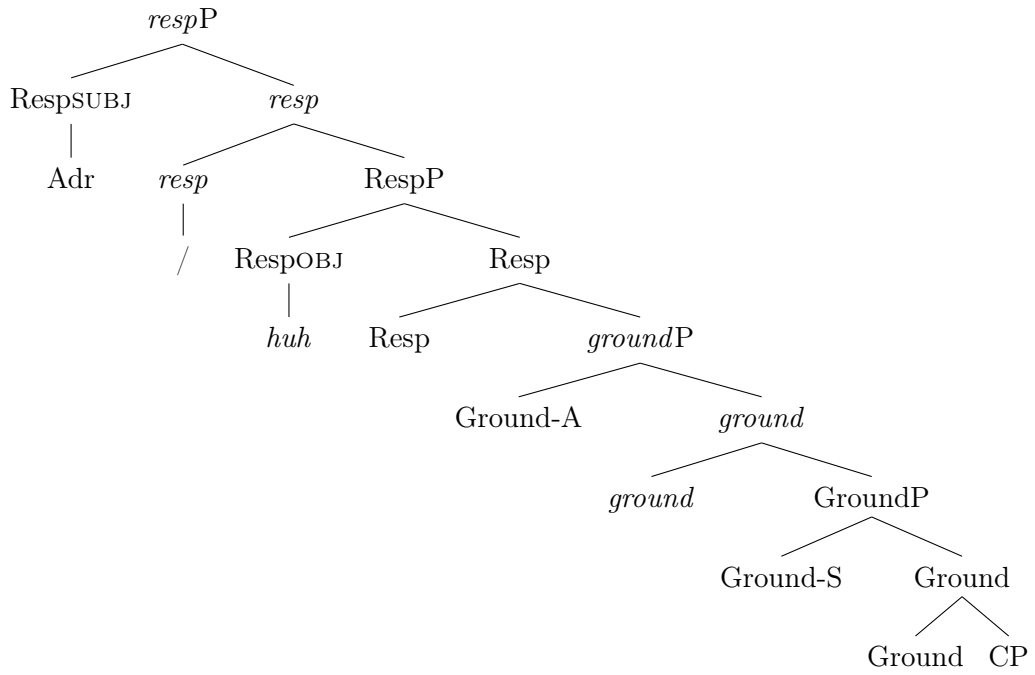


Figure 4.7: The structure of a response particle like *huh*, presented in Wiltschko (2017).

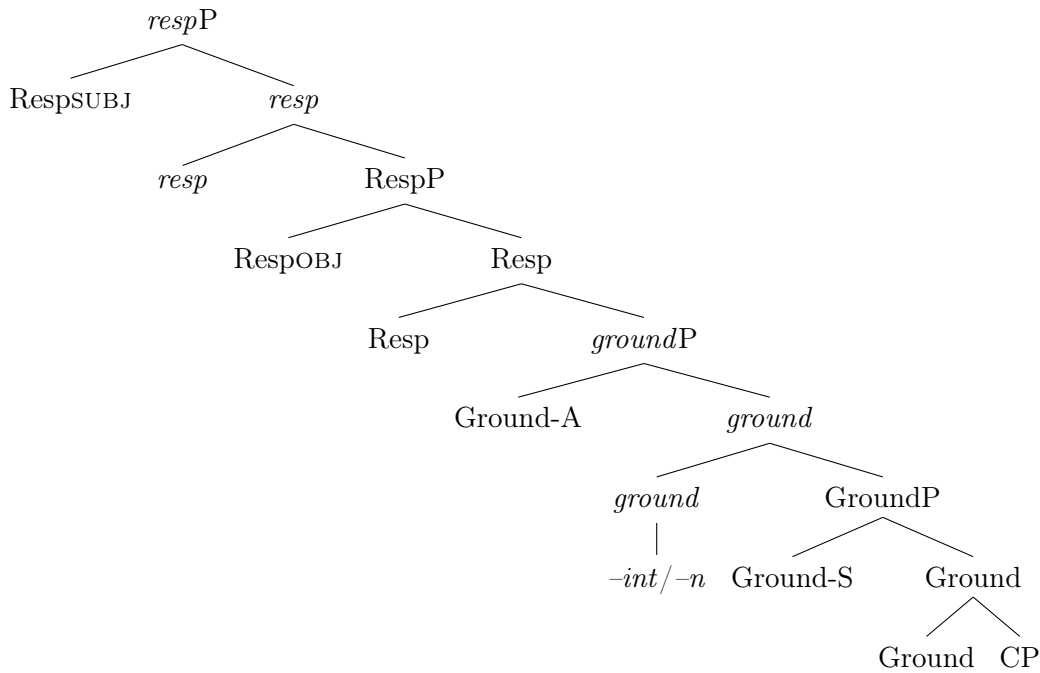


Figure 4.8: Location of  $-n$  and  $-int$  in the left periphery.

Wiltschko does not discuss how Cantonese particles *me1* and *ho2* fit into this framework; given Lam’s categorisation, one might assume that *ho2*, as a particle which requests confirmation, would be in *RespP*, while *me1*, as additional information about the speaker’s stance, would be in *Ground-S*. However, this is purely an assumption.

I will use and adapt the conversation domain framework from Wiltschko and Heim (2016) and Wiltschko (2017) in order to position Scots particles  $-n$  and  $-int$  syntactically in a way that builds on their relationship with invariant confirmational particles. In particular, I will suggest that while particles like *right* or *huh*, which request further confirmation, may be in *RespP*,  $-int$  and  $-n$  are in *Ground-A*, and offer further information about the speaker’s belief that  $p$  is in *SP(a)* (see section 4.3.3 for more details).

### $-n$ and $-int$ in *GroundP*

Recall the semantic analysis I gave for the Scots particles  $-n$  and  $-int$  in section 4.3. The particles are CHECK moves, which are defined as indicating that the speaker believes that the addressee believes  $p$ . They do not explicitly request a response. Syntactically, therefore, I argue that these particles head *ground* in Wiltschko’s (2017) *Ground-A* domain.

I believe this is the best way to model the distribution of the particles. I will discuss

this for tag questions on positive anchors, exclamatives and rhetorical questions, with key justification coming from tag questions on negative anchors.

Following the VP-ellipsis analysis of tag questions given above Sailor (2011), and the observation of Ladd (1981) that falling tag questions (the most frequently occurring type of tag question (Dehé and Braun 2013)) have their own nuclear contours, I assume that the anchor clause of the tag question and the tag itself are in separate clauses, rather than involving any sort of movement of the clause above the tag, or duplication, as in analyses presented by Culicover (1992) or den Dikken (1995).

In a tag question with a positive anchor, the main clause is a straightforward declarative assertion in which the speaker is happy to take responsibility for  $p$  in CG (see section 4.3 for more details). Following Wiltschko (2017), nothing is required to be in Ground-S with a standard assertion, where the speaker is taking responsibility for  $p$ . The additional semantic quality of the tag question is based around the relationship between the speaker and the addressee, and specifically states that the speaker believes the addressee believes  $p$ . While I argued that this encourages a response from the addressee as the speaker has made a claim about what the addressee believes (see section 4.3 for more details on the semantic and pragmatic distribution of the form), it is not directly requesting a response; it is instead CHECKING the speaker is able to explicitly add that  $p$  is believed by the addressee into their understanding of the Common Ground, providing this is not explicitly denied.

I thus posit that the positive anchor clause in the tag is a regular assertion; the VP-elided clause that follows it contains the  $-n$  or  $-int$  particle in GroundP, selecting for  $p$  to be CHECKED. Both semantically and syntactically, this is a separate clause. I thus do not believe a tag question and its anchor are a singular complex speech act, but rather consecutive speech acts (see section 4.3 for further discussion).

Exclamatives and rhetorical questions are straightforwardly accounted for in this framework as the same constructions syntactically<sup>63</sup>, but without VP-ellipsis – the  $-n$  and  $-int$  particles again are used specifically to target the relationship between the speaker and the addressee.

This analysis deals especially well with tag questions on negative anchors. As we saw in chapter 3, participants did not accept  $-n$  or  $-int$  on tag questions with negative anchors.

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<sup>63</sup>The scalarity aspect of exclamatives that I discussed in section 4.3 could be dealt with by a silent POS operator situated in the VP (Kennedy and McNally 2005), as compared to the rhetorical question which would not require POS. However, I set this aside.

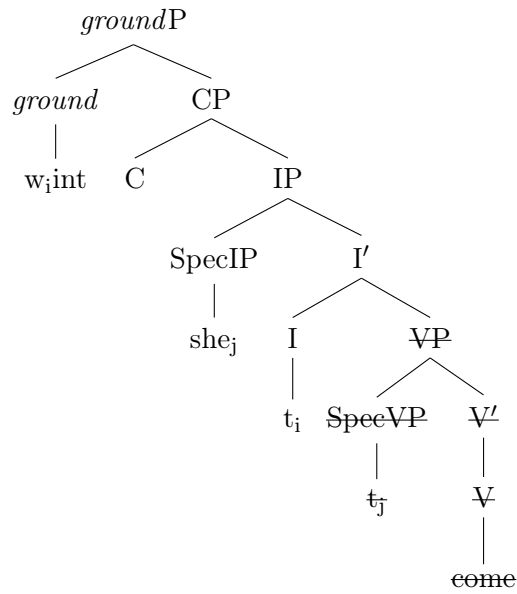


Figure 4.9: Tag question on positive anchor in Glasgow Scots: *She'll come, wint she?*. Movement will be discussed in section 4.4.3.

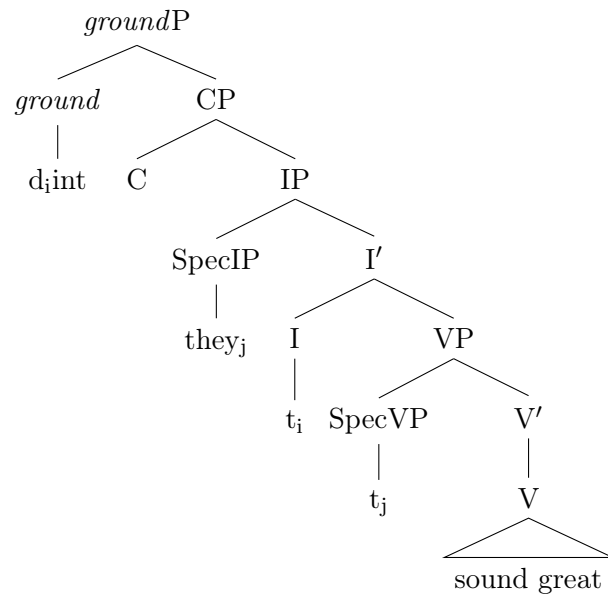


Figure 4.10: Exclamative in Glasgow Scots: *Dint they sound great!*. Movement will be discussed in section 4.4.3.

(312) \*She canna come, can'n she? (Shetland)

(313) \*She cannae come, kint she? (Glasgow)

At first glance, this is one point that would perhaps be in favour of the NegP analysis, otherwise ruled out above. Generally, tag questions are of the opposite polarity to their anchor. While there are some contexts where positive tags on positive anchors are acceptable, negative tag questions on negative anchors in English are extremely uncommon (Tottie and Hoffman 2006). If *-n* and *-int* are not in NegP, as I am arguing, why are these particles not available to check a negative proposition?

Tag questions with *-int* and a lower negative marker *no* were acceptable in neutral evidential contexts for Glasgow speakers, and tag questions with *-n* and a lower *no* were to some extent acceptable in neutral contexts for older Shetland speakers.

(314) She canna come, can'n she no? (Shetland)

(315) She cannae comme, kint she no? (Glasgow)

While these constructions have not previously been analysed in the literature, there has been some discussion suggesting that these are instances of two negation markers which are ‘cancelling each other out’ (Millar and Brown 1979, Beal 1993) in the sense of double negation (Horn 1989:22), leading to an interpretation of the tag as positive, and therefore able to occur on a negative anchor. This would be surprising if it were the case: double negation is extremely marked in languages that allow it, including English (Svenonius 2002, Blanchette 2015), and is only licensed either when the two negations are syntactically too far apart to enter into concord, or when contradicting a previous negative assumption (Blanchette 2015:17). Neither of these things are the case in examples like (314) or (315), especially given that these tags are not acceptable in the context where there is a contradiction.

However, the CHECK analysis accounts for this data nicely, ruling out examples like (312) and (313) syntactically. It is also able to account for the difference in acceptability by evidential context.

Recall that VP-ellipsis must be licensed either by an IP or a NegP, whichever is the head most immediately governing the VP that is to be elided. In a negative clause, VP-ellipsis is ‘grammatical when empty VP is preceded by contracted or uncontracted negation’ [in NegP] (Lobeck 1995:154).

(316) Mary will leave but John will not [~~VP~~leave].

(317) \*Mary will leave but John will [~~NegP not~~ [~~VP leave~~]

Furthermore, recall that the semantic analysis for the CHECK marker is that it is checking that the proposition in the CP below is in the addressee's beliefs. When there is a negative anchor to the tag question, the CHECK marker must select the *negative* proposition to check, otherwise there would be a polarity mismatch between the anchor and the tag, with the speaker taking responsibility for a negative proposition in the anchor clause, but attempting to check that the opposite, positive proposition is in the addressee's belief set in the tag.

(318) She can come [<sub>groundP</sub> k<sub>jint</sub> [<sub>IP</sub> she<sub>i</sub> [<sub>I</sub> t<sub>j</sub> [~~VP t<sub>i</sub> come~~]]]]

(319) She cannae come [<sub>groundP</sub> k<sub>jint</sub> [<sub>IP</sub> she<sub>i</sub> [<sub>I</sub> t<sub>j</sub> [<sub>NegP</sub> no [~~VP t<sub>i</sub> come~~]]]]]

(320) \* She cannae come [<sub>groundP</sub> k<sub>jint</sub> [<sub>IP</sub> she<sub>i</sub> [<sub>I</sub> t<sub>j</sub> [~~VP t<sub>i</sub> come~~]]]]

This analysis better accounts for the data than an analysis which argues that somehow this is an instance of two negative markers cancelling each other out. Firstly, in order to be licensing VP-ellipsis, the *no* negation in examples like (319) *must* be in the clausal, polarity instantiating NegP position and *not* in some sort of adverbial negation position where it would be elided. So, without adding some special 'high negation' position, there is no obvious way to account for both of these particles as in NegP projections – and as we saw above, there is no reason to suggest that *-int* or *-n* is in a special 'high negation' position.

Finally, the CHECK analysis in which the marker checks the proposition in CP is in the addressee's belief set accounts for the variation in acceptability of these *-int + no* and *-n + no* type tags depending on the evidential context, as seen in section 3.3.11. Examples of these tags on negative anchors in neutral evidential contexts, such as (321), scored significantly higher than they did on negative anchors in negative evidential contexts, such as (322), for speakers in Glasgow and for older speakers in Shetland.

(321) For some months, there was a cat that would sit outside my door. You would always say hi to it. However, you realise you haven't see it for a while. You come in and you say:

That cat isna/hasnae been here for a while, **is'n it no** / **hint it no**?

(322) I have been trying to win a holiday by collecting the codes on the backs of crisp packets. You thought this was ridiculous all along. When the closing date passes, I tell you I am really disappointed not to win. You say:

You didna(e) really think you'd win, **did'n you no** / **dint you no**?

If these tags were simply a case of two negative markers cancelling each other out and thus giving a positive tag, there would be no reason why the tag would be more acceptable in neutral evidential contexts over negative evidential contexts. As is also shown in section 3.3.3, there was no contextual difference in acceptability for standard reverse polarity tags on negative anchors, so it is not the case that in general, tags were dispreferred in negative evidential contexts.

Finally, as is mentioned above, double negation is used exclusively in contradictory environments (Blanchette 2015). It would therefore be very surprising if these tags were double negatives, but were preferred specifically in contexts where there was no contradiction between the speaker's existing belief and their surrounding evidential context. I thus conclude that a neo-performative analysis for *-int* and *-n*, specifically with the particles in Ground-A, is the best analysis for the data.

### **Movement to GroundP**

Following this analysis where *-int* or *-n* associates with Ground-A in *groundP*, there is then a question of how and why the auxiliary moves to combine with these particles in the left periphery. I have argued that constructions with these particles are *not* interrogatives, not introducing any sort of interrogative speech act or  $\{p, \neg p\}$  to the semantics. Syntactically, this means there is no [Q] feature on C triggering interrogative inversion. How does the auxiliary get to CP?

[Q] is of course not the only feature that can trigger movement in the syntax – in fact, head movement is often '*seen as a way to fulfil some kind of morphological licensing, driven by the status of some head as a bound affix or not*' (Koopman 2000:264) – clearly, the particles discussed in thesis are bound affixes. For considerable discussion on what triggers head movement, e.g. c-selection, EPP, *wh-*, and how head movement should be analysed see e.g. Koopman (1983), Travis (1984), Baker (1988), Chomsky (1995), Pesetsky and Torrego (2001), Matushansky (2006), Roberts (2010). I follow these accounts, which support the syntactic nature of head movement, rather than Chomsky (2001), Mahajan (2003), Müller (2004) who propose rethinking the existence of head movement altogether.

In particular, I follow Roberts (2010), who proposes a system of head movement based on 'defective goals'. In this system, a goal can move to a probe iff it is 'defective' as defined in (i)).

- i) A goal G is defective iff G's formal features are a proper subset of those of G's probe P.

In order to account for differences between French and English with respect to V-to-T, for example, Roberts proposes that there is a parametric difference between the feature specifications on T<sup>64</sup>. In French, T has [<sub>i</sub>T, <sub>u</sub>V, <sub>u</sub>ϕ]. T's [<sub>u</sub>ϕ] feature will be dealt with by the ϕ-features on the subject that intervenes between T and v; v hosts [<sub>u</sub>T, <sub>i</sub>V] features, which constitute a proper subset of T's features, and thus movement is triggered.

In English, on the other hand, T hosts [<sub>i</sub>T, <sub>u</sub>ϕ]. There is no [<sub>u</sub>V] feature on T, and so the [<sub>i</sub>V] feature on v leads its features not to be a proper subset of those on T. Head movement is therefore not triggered. In order to have subject-auxiliary inversion in questions, there is T-to-C movement, with T[<sub>i</sub>T, <sub>u</sub>ϕ] being probed by C[<sub>u</sub>T, <sub>i</sub>C, <sub>i</sub>Q] as a defective goal. As the main verb has not moved to v from V, it is not available to move to C – vP is a phase head (Citko 2014) and the main verb has not moved to the edge of the phase by the time it is spelled out (Roberts 2010). *do* is thus inserted as a last resort in an unfilled T, and moves to C, or an auxiliary which has been base generated in T will also move.

In the Scots data, I propose that the auxiliary in T moves to combine with the *-int* or *-n* particle in *ground*P following this same 'defective goal' theory.

I assume in order to trigger movement, *-int* and *-n* have a [<sub>u</sub>T] feature which must check with [<sub>i</sub>T] on T. In order to be a defective goal, i.e. in a proper subset relationship to *ground*P, T's [<sub>u</sub>ϕ] feature must be checked before *-int* or *-n* is merged in; this will happen locally with the subject. Movement could thus be accounted for by the defectiveness of T in relation to the *-int* and *-n* heads, as seen in Figure 4.11.

Although this is not standard interrogative inversion, *do*-support is still triggered in these contexts. This is unsurprising given the assumption that the main verb has not moved to the edge of the vP phase by the time it is spelled out (Roberts 2010). In order to combine with the affix in cases where there isn't an auxiliary in T, *do*-support occurs to ensure that the affix isn't left stranded. This would mean that the conversation domain is in a singular phase with CP. I also follow Roberts (2010) and Biberauer and Roberts (2010) in proposing that head movement is not cyclic and but rather follows the idea of phases and Spellout; this means that it is not necessary for the auxiliary to move through

<sup>64</sup>Biberauer and Roberts (2010) propose a more complex mechanism for V-to-T movement which derives from the richness of tense morphology (see also e.g. Holmberg and Platzack (1995), Rohrbacher (1999), Koenenman and Zeijlstra (2014) on the Rich Agreement Hypothesis). For the purposes of this thesis, the level of detail presented by Biberauer and Roberts (2010) is not relevant; I simply present Roberts' theory here as an example of how features can cause movement of verbal heads.



C to get to *groundP*.

In section 4.4.3 I discussed the reasons that have been used in the literature in order to justify incorporating a discourse domain – primarily, that syntactic phenomena such as agreement and ordering effects can be seen. My proposal for head movement to the discourse domain based on features and defective goals is further evidence that there is a need to syntacticize this sort of ‘conversation domain’. There can be affixes in this domain which must to be attached to material that comes from within the proposition. The reanalysis which has gone on in Scots has caused this to be the case.

I note that while I argue in favour of head movement within the syntax here, it is also possible that movement of the auxiliary to *groundP* could be purely for PF reasons, as an instantiation of Lasnik’s ‘Stray Affix Hypothesis’ (1981). The Stray Affix Hypothesis is a morphological restriction that states that a bound affix cannot be realised at PF if it is not syntactically dependent e.g. if it has not been affixed to something. This would therefore trigger head movement of the auxiliary to the left periphery and would still account for the data in an analysis which wished to reject pure syntactic movement (though see Matushansky (2006) and Roberts (2010) for arguments in favour of syntactic movement due to e.g. LF effects).

#### **A note on other varieties**

It is not only the two varieties of Scots investigated in this thesis that accept tags on negative anchors like the *-int + no* and *-n + no* tags described above. As discussed in chapter 2, these tags are found in a number of British English varieties. Importantly, these constructions are *not* available in standard English, or generally in southern/non-British non-standard varieties.

(323) Your name’s no Willie, isn’t it no? (Edinburgh, Millar and Brown 1979)

(324) She can’t come, can’t she not? (Newcastle, Beal 1993)

(325) She won’t come, won’tn she not? (Tyrone, Warren Maguire p.c.)

In the Edinburgh and Newcastle examples, *-n’t* negation is found in these constructions, while in Tyrone an additional *-n* can be added to any monosyllabic negative auxiliary, with a similar distribution to Shetland *-n* and Glasgow *-int*, above<sup>65</sup>.

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<sup>65</sup>Warren Maguire (p.c.) states that this additional *-n* is available in tag questions on positive anchors in Tyrone English, especially in neutral evidential contexts, as well as these examples with a lower *not* on a negative anchor. He attests some acceptability of *-n* in interrogative exclamatives and polar rhetorical questions, but in no other context.

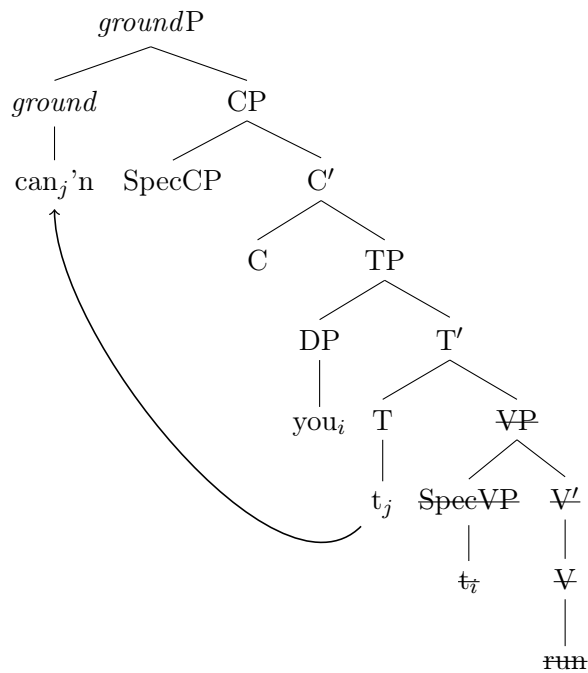
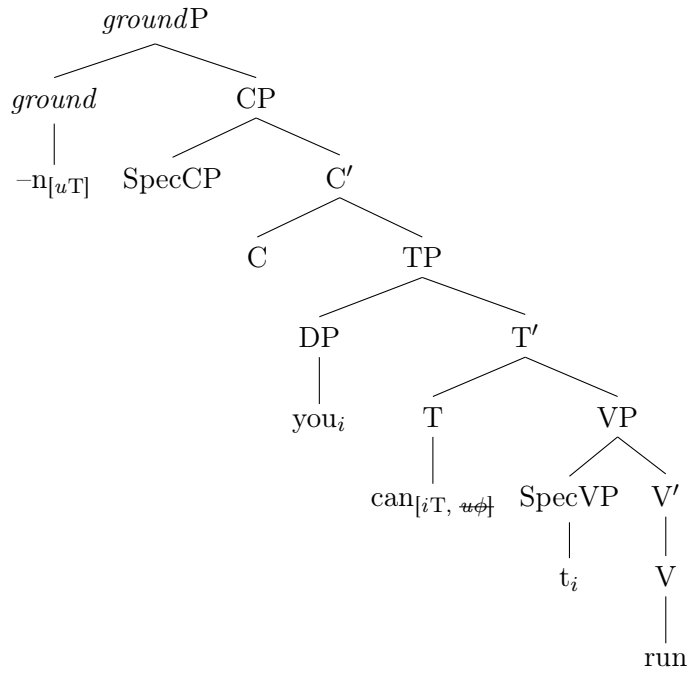


Figure 4.11: Movement of *can* to *groundP*, where it takes *-n* as an affix, due to its status as a defective goal in a construction like ‘You can run, can’n you?’ (note also VP-ellipsis).

Given these Edinburgh and Newcastle examples, it is easier to see how a double negation analysis arose – these tags do not have any markers which are clearly different from negation markers that are available in negative declaratives or imperatives in standard English. However, note that in Edinburgh Scots, main propositional negation is *-nae*<sup>66</sup>, not *-n't*. Having *-n't* is therefore unusual when compared with the general realisations of negation in the variety. (This is noted by Cormack and Smith (2012), whose analysis for Edinburgh Scots *-n't* more generally is discussed above.)

The Newcastle example is perhaps the most puzzling: however, we know from Tagliamonte and Smith (2002) that availability of *-n't* in negative questions in English appears to operate on a continuum from north to south of the UK, with *-n't* only available in ‘rhetorical questions’ in Scotland, the north of England (e.g. Newcastle) and Northern Ireland. In fact, it appears that in these varieties *-n't* acts like Glasgow Scots *-int* or Shetland dialect *-n*, with the same syntactic and pragmatic distribution.

I thus hypothesise that in varieties where *-n't* is only available in Tagliamonte and Smith’s ‘rhetorical questions’ (including tags, as is shown for Edinburgh by Millar and Brown (1979) and for Newcastle by Beal (1993)) but not in biased questions or true negative questions, *-n't* is a CHECK marker, not negation, and is situated in *groundP*, just like *-n* and *-int*. A full investigation of the distribution of *-n't* in Edinburgh Scots and Newcastle English is outwith the scope of this thesis – however, from the existing descriptions, this seems to be the case.

#### 4.4.4 The role of prosody

Above, I argued in favour of analysing Scots CHECK moves *-n* and *-int* as being situated in the left periphery, following the neo-performative framework of Wiltschko and Heim (2016) and Wiltschko (2017). The particles are situated in *groundP*, encoding the speaker’s perception of the addressee’s beliefs. This analysis appropriately captures the relationship of these particles to things like confirmationals, and to the speech act domain, while providing further evidence that there is a need to have some sort of speaker/addressee relationship syntactically encoded at the periphery.

A core part of the proposal put forward in Wiltschko and Heim (2016) and expanded by Wiltschko (2017) is that in English varieties, intonation is situated in ResponseP, following a Truckenbrodt (2015) style analysis in which rising intonation

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<sup>66</sup>Of course, *-nae* would not be available in question contexts; however, the point is that *-n't* is not the standard propositional negation in Edinburgh Scots; therefore, *-n't* stands out in comparison, unlike in the Newcastle examples, where *-n't* is also the main propositional negation.

encodes the meaning of a questioning speech act and thus provides a ‘call on addressee’. They argue using the example of Canadian *eh* that while the particle *eh* itself grounds the proposition (or, in Wiltschko’s extended analysis, marks out the proposition as the object for responding to), it is *rising intonation* that provides the call on the addressee to confirm the speaker’s belief of *p*. They contrast this example of ‘confirmational’ *eh* with a particle they describe as ‘narrative’ *eh*. Narrative *eh* is reportedly used to mark discourse continuation and does not have strongly rising intonation. This can be seen in Figure 4.7.

The incorporation of intonation into the syntactic structure as Wiltschko and Heim (2016) and Wiltschko (2017) do predicts that intonation contours exhibit grammaticality and that there should be a strong association between certain particles and intonation structures. For example, *right* and *huh* only associate with rising intonation which sits above it in the structure; rising intonation in ResponseP alone is taken to signal polar questions.

I varied rising vs falling intonation in the judgment tasks that participants carried out, with the hypothesis that falling intonation would be preferred: as standard assertion intonation, falling intonation encodes no explicit call on addressee and is thus the ‘default’ intonation if none is syntactically encoded in the Wiltschko and Heim framework. This also follows from the contingency analysis for rising intonation (Gunlogson 2008) supported in section 4.3.

However, there was no effect of prosodic contour on the acceptability of *-n* or *-int* at any point, and so intonation was excluded from the final models. It is also worth noting that intonation was also varied in the standard verb-subject-no form of the interrogative constructions tested, and again no effect of intonation was found.

It does not seem to be the case that participants could not hear differences in prosody. For example, as filler examples, participants were asked to judge examples of negative imperatives. Negative imperative subjects are argued to be available either above (high) or below (low) *don’t*, with true imperative subjects above *don’t* distinguished from vocatives by the lack of an intonational boundary between the subject and *don’t* (Jensen 2003, Zanuttini 2008, Potsdam 1996). However, results showed that participants in both Shetland and Glasgow dispreferred examples of negative imperatives with high subjects (with no intonation break), which had a significantly lower mean acceptability rating than imperatives with low subjects. This is not predicted if both are available. This shows that participants are paying attention to the intonation, in that the only thing blocking the (grammatical) vocative interpretation of the ‘high subjects’ is the lack of intonation break.

Additional comments provided by the participants on the imperative examples also expressed the opinion that in the high cases, the subject wasn't 'stressed' enough, or that there needed to be more of a separation between the subject and *don't* – i.e., to be acceptable, the 'subject' actually needed to be a vocative. This has two consequences: firstly, for negative imperatives, it suggests that true high subjects are not actually available, against the opinions and judgments given in the literature. Further research here is required, but is outwith the scope of this research. Secondly, however, and more pertinently for the argument presented here, this result shows that there are contexts where the judgments given by the participants in this research *were* affected by intonation. This adds weight to the argument that whether the intonation was rising or falling was not important for the overall acceptability of the *-n* or *-int* construction and should not be encoded in the syntactic structure.

Furthermore, direct comments from participants on the *-n* or *-int* examples themselves indicate that varying intonation was not crucial for acceptability. For example, when asked directly about the acceptability of rising intonation, participant GY01, a young Glaswegian man, said that it was acceptable, although he offered an example with falling intonation as perhaps a more usual way of hearing it.

GY01: I would expect to hear that all the time  
 E: yeah?  
 GY01 aye five  
 E: ok ... even-  
 GY01: the the 'hint'  
 E: even- yeah  
 GY01 'hint' is like really really common I think  
 E: mhm ... would you-  
 GY01 more so than like 'dint'  
 E: ok ok 'hint' more common ok ... emm would you  
 expect to hear it in  
 that way like that really sort of surprise like  
 'hint ↗they'  
 kind of way  
 GY01: aye or like 'hint ↘ye'  
 E: 'hint ↘ye' yeah  
 GY01: yeah  
 E: ok

Moreover, GY09, another young Glaswegian man, commented that he wanted more falling intonation on *-int* tags on three occasions. However, two of those three occasions already had falling intonation. This suggests that this particular participant was aware of the intonation and was paying attention to it, but that the meaning or acceptability of the

construction was not affected by the intonation contour.

All of these comments indicate that intonation does not encode a specific semantic meaning to the *-n* or *-int* constructions that requires syntacticization, but rather some more loosely pragmatic meaning, the acceptability of which is more able to be affected by context (as has been found in other work on the role of intonation contours in establishing speaker/addressee beliefs or speech acts (Lieberman and Sag 1974, Ladd 1978, 1980, Ward and Hirschberg 1985)). Wiltschko and Heim's (2016) framework, which formalises intonation in the syntax in the same way as particles, cannot accurately capture this difference in semantic vs pragmatic meaning.

Evidence from other non-canonical questions also lends support to this. Classically, polar rhetorical questions have been assumed to have falling intonation (Han 2002), or perhaps a mixture of rising and falling intonation (Banuazizi and Creswell 1999). However, Dehé (2017) shows that different combinations of boundary tones, nuclear accent placements and overall nuclear contour patterns contribute to speakers' interpretation of an interrogative as a rhetorical question. Clearly, many complex facets of intonation can contribute to the meaning of a construction and it is not clear how all of these could be syntacticized in the way that Wiltschko and Heim try to do.

I follow Gunlogson (2008) in arguing that rising intonation signals *contingency* (see section 4.3.5 for more details). When there is no rising intonation, the validity of the speaker's move no longer depends on the subsequent moves of the addressee. This accounts for the lack of variation in acceptability of constructions based on their intonation – regardless of which is the preferred intonation in production, participants were able to be flexible about the pressure that the example was putting on the addressee.

This result points in favour of an analysis where intonation does contribute meaning, but from a separate modular domain (Selkirk 1981, 1984, Nespor and Vogel 1986, Zec and Inkelas 1990, Jackendoff 2002, Büring 2013) such as through an intonation phrase, or a pairing mechanism between syntactic structures and prosodic structures, giving ordered <s,p> pairs for interpretation at the semantic/pragmatic level. I do not take any position on which of these models is most appropriate for the data. While this thesis cannot shed much light on the exact interfaces, it certainly suggests that when conceptualising production, we must take into account the fact that in perception studies, participants do not consider intonation integral to the acceptability of non-canonical question utterances, despite preferences in production.

#### 4.4.5 Implications for confirmationalals

Wiltschko and Heim (2016) argue that the difference between ‘confirmational’ and ‘narrative’ *eh*, as discussed above, is purely the addressee response requirements. Rising intonation in the confirmational case puts the proposition ‘up for question’ and requires an addressee response, while narrative *eh*, with its falling intonation, does not. However, they provide only one example paragraph to demonstrate the two intonations, which comes from a radio monologue. Although the *ehs* in the monologue vary in their intonation, at no point is there an addressee that directly responds or confirms what the speaker is saying – not even following the examples which have strongly rising intonation. Of course, there are arguments to be made about the rhetorical nature of this kind of monologue, acting as conversation without a direct addressee. However, this weakens the strong argument made by Wiltschko and Heim that the intonation is *key* to the meaning of the particle; key enough to be represented in the syntax. Clearly, it is not essential that an addressee responds, though there may be a stronger pull on one to do so in a conversation when there is rising intonation.

I suggest, then, that similar to the situation with Scots *-n* and *-int* particles, there may be prosodic preferences for these confirmational particles that come out in production studies. However, these intonation contours are not *essential* for the meaning of the particle, and do not need to be syntacticized in such a way as to make them part of the core meaning: the acceptability of the construction is not affected by the intonation contour.

Instead, I suggest that while Wiltschko and Heim are right to say that the meaning of a confirmational should be broken down into the contribution of the particle and the contribution of the intonation, intonation is part of a separate domain. The contingency (or lack thereof) invoked by the rising intonation contributes pragmatic meaning, but does not have to be syntactically encoded.

The weaker meaning of *contingency* compared to ‘up for question’ (i.e. contributing the meaning of the speech act) implies that there needs to be more semantic content to the contribution of the particle. In Wiltschko and Heim’s analysis, they posit that a tag like *right* ‘marks the proposition as the object up for question’. Rather, I suggest that a particle like *right* must semantically encode some sort of *confirmational* meaning. *right* can then head ResponseP, as seen in Figure 4.12.

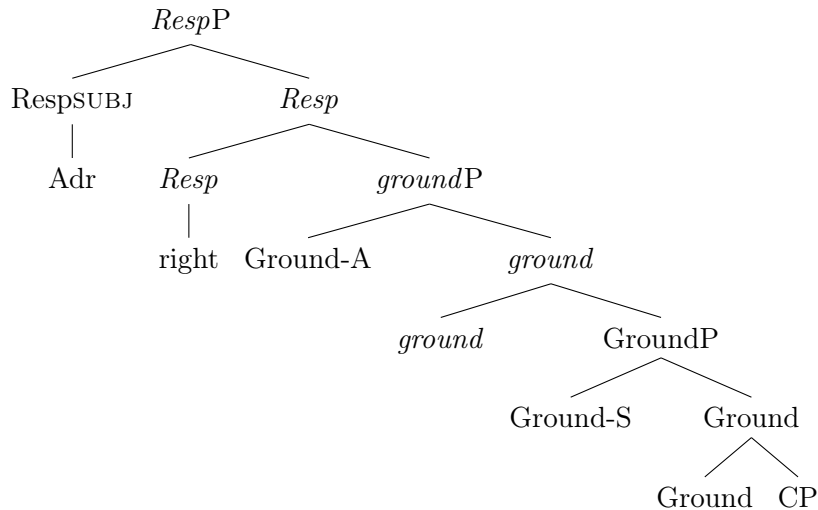


Figure 4.12: Confirmational *right* heading ResponseP instead of the rising intonation posited by Wiltschko and Heim (2016) or Wiltschko (2017).

#### 4.4.6 Implications for English canonical tags

Throughout this chapter, I have argued that although particles like Shetland dialect *-n*, Glasgow Scots *-int* and even *-n't* in some Scots and northern English varieties may look superficially like negation, they are not. However, as stated above, I believe there is good reason to maintain the relationship between biased questions like (326) and tag questions like (327) established in the literature (van Rooij and Šafářová 2003, Sailor 2011, Krifka 2015). Tag questions are thus VP-elided biased questions, and the *-n't* in examples like (327) is not a CHECK move. In fact, I argue that the other tag questions in Scots, the verb-subject-*no* tags, are also instances of these VP-elided biased questions.

(326) Can't she come too?

(327) She can come, can't she? (standard English)

(328) Can she no come too?

(329) She can come, can she no? (Scots varieties)

Syntactically, there is no reason to invoke the conversational domain in these tags – they are interrogatives, with T-to-C movement due to the [Q] feature on C. Intonation is contributed from a separate domain, and either contributes contingency or not.

One final phenomenon worth noting: Reese and Asher (2006) point out that tag questions with their own nuclear contours can have rising intonation; however, there are



also instances of tags which do not have an independent nucleus separate from their anchor clause (also discussed by Ladd (1981)). These tags always have rising intonation (Ladd 1981, Reese and Asher 2006, Dehé and Braun 2013). I have not discussed post-nuclear tags in this thesis. However, it may be interesting to investigate whether these tags are syntactically different from canonical tags with a separate nucleus. For example, these tags appear to behave differently with regards to polarity item licensing, as shown by Ladd (1981), and permit *by any chance*, which only appears in neutral (non-biased) questions (Reese and Asher 2006). (In the following examples, I use Ladd's notation in which '=' (e.g. (330)) signals that the tag is post-nuclear, while '/' (e.g. (331)) indicates that the tag has a separate nucleus.

(330) J can't come too=can she?

(331) \*J can't come too / can she? (Ladd 1981:169)

(332) M can't come, by any chance=can she?

(333) \*M can't come, by any chance / can she?

(334) \*M can come, by any chance=can't she?

This suggests that post-nuclear tags are complex interrogatives. (330) is acceptable because the negation in the main clause is biased question negation and thus does not anti-license PPIs, while in (331) the negation is regular clausal negation. (332) must be a neutral (non-biased) question to license *by any chance*. This is based on the form of the tag, which is positive. The same construction is not licensed in the nuclear tag form (333) as there it would be part of a declarative clause, with the nuclear tag ('neutral' question) entirely separate. (334) is ruled out because the negation in the tag makes it a biased, and therefore not neutral, question (Reese and Asher 2006).

There may also be differences in the possibility for mismatches between the anchor and the tag. Sailor (2011) argues that evidence from mismatched tags and anchors (for example, in terms of their auxiliary verb or their subject) works in favour of ruling out a movement/duplication analysis. This is indeed true of nuclear tag questions, but dubious for post-nuclear tag questions, as in these examples:

(335) \*John is drinking scotch and Mary is drinking whisky=aren't they?

(336) \*We ought to leave now=shouldn't we? (examples adapted from Sailor 2011)

However, I leave a full investigation of the syntax of post-nuclear tags for future research.

#### 4.4.7 Summary

In this section, I have built on the semantic and pragmatic analyses I established for the particles *-n* in Shetland dialect and *-int* in Glasgow Scots. Although they may look on the surface like negation markers, and appear in contexts where negation markers appear in standard English, I argued that their limited pragmatic distribution meant that they were better analysed as discourse particles, specifically CHECK moves. In this section, then, I presented a syntactic analysis for the particles which aligned with this semantic analysis, drawing on the relationship between canonical tag questions and confirmational particles.

Firstly, I briefly considered the two existing syntactic analyses of negative markers in Scots – Thoms et al. (2013) and Cormack and Smith (2012) – and whether the data presented in this thesis could be accounted for in either of these frameworks. However, I showed that both of these accounts are problematic for the data presented here, due to the established relationship between biased questions and tag questions, assumptions that would have to be made about speech acts, and the possibility of having more than one ‘negation’ marker in one clause.

Instead, I made use of the neo-performative syntactic framework established by Wiltschko and Heim (2016) and Wiltschko (2017). The *-int* and *-n* particles are situated in *groundP*, a projection for additional grounding information. Rather than being syntactically interrogatives, triggering movement through a [Q] feature on C, I motivate head movement to this discourse domain using Roberts’ (2010) theory of defective goals, with *-int* and *-n* probing for an [<sub>i</sub>T] feature. Movement is licensed due to T’s features not equalling a proper subset of *ground*’s features. I therefore provide evidence of another syntactic phenomenon (head movement) operating in the discourse domain, building on the evidence presented in the literature from e.g. Haegeman and Hill (2013) and Hill (2013) regarding agreement and ordering restrictions.

The analysis I presented here is also able to explain the otherwise puzzling tags on negative anchors where the particle *-n* or *-int* appears with a lower negation marker *no*, making use of Sailor’s (2011) VP-ellipsis analysis of tag questions. Furthermore, the analysis means that in these varieties, there is a clear parallel between the syntax of tag questions, rhetorical questions and exclamatives.

The analysis has implications for the syntactization of intonation as posited by Wiltschko and Heim (2016). I briefly discussed this, suggesting that the results presented in this thesis suggest that rather than placing intonation in a projection in the syntactic structure, the relationship requires that the intonation contour is contributed separately,

but interfaces with the syntax before being passed on to the semantic/pragmatic domain. This had consequences for the authors' interpretation of confirmational particles, which I briefly discussed.

I also briefly discussed tags in other varieties of (northern British) English, arguing that varieties which permit tags on negative anchors which look like 'double negation' also have this type of CHECK construction in *groundP*. However, I noted that this analysis does not have an impact on the analysis of standard English canonical tags, which I still take to be VP-elided biased questions.

## 4.5 Conclusions

In this chapter I provided a pragmatic, semantic and syntactic account of the *-int* and *-n* particles in Glasgow Scots and Shetland dialect. Based on the across-construction distribution from the results of the data collection that I presented in chapter 3, in section 4.2 I firstly established the specific pragmatic factors that license the particles, making use of the bias/belief distinctions set up in Sudo (2013) and showing that the key connection between the three constructions that permit *-n* and *-int* is the relationship between the speaker and the addressee. I did this through the use of three pieces of evidence: the ability of the speaker to attribute the belief of *p* to the addressee (and how this works for predicates of personal taste); the ability for the speaker to revise and take full responsibility for *p* in the event that the addressee is not also an independent source, and discourse closure, using the possibility of a following *so* continuation.

In section 4.3 I built on this pragmatic evidence to propose a semantic definition for the particles, using Ginzburg's (2012) interactive dialogue model. I labelled *-int* and *-n* CHECK moves, defining a CHECK move as expressing that the speaker believes the addressee believes *p*. This is not-at-issue content. The overall goal of producing a CHECK move is that the speaker adds both *p* and that  $p \in \text{SP}(a)$  (the addressee's belief set) to their interpretation of the Common Ground. I compared this move to the moves carried out by canonical tag questions in standard English, which are true interrogatives but with pragmatically Known Answers given by the declarative assertion in the anchor of the tag. This built on Reese and Asher (2006) and Gunlogson (2008), and I argued handles the specifics of the data better than recent accounts of standard English canonical tag questions proposed by Farkas and Roelofsen (2017) and Malamud and Stephenson (2014).

Finally, in section 4.4 I rounded off the analysis by proposing that rather than being situated in NegP as might have first been imagined, the syntactic analysis of *-int* and *-n*

in fact reflects their semantic analysis as discourse particles. Specifically, I proposed that *-int* and *-n* were situated in a *groundP* projection in the conversation domain of the left periphery (Wiltschko and Heim 2016, Wiltschko 2017). I argued that this was evidence of head movement to the discourse domain, thus adding movement to the list of syntactic phenomena seen in this peripheral domain. The syntactic analysis I proposed was able to deal with particularly problematic data from negative tags, as well the three relevant positive constructions (tag questions on positive anchors, polar rhetorical questions and interrogative exclamatives); I also briefly discussed and argued against the syntacticization of intonation proposed by Wiltschko and Heim (2016) and Wiltschko (2017), and the impact this would have to for analysing the syntax of confirmational particles like *right* and *eh*.

The analysis I have presented in this chapter is therefore a coherent analysis of the two Scots particles *-int* and *-n*, which addresses their pragmatic licensing, their meaning and relationship to intonation, and how they should be modelled in the syntax. Throughout, I have shown how the particles are similar to, and where they diverge from, their parallel constructions in standard English.

In this section, I have sought to address the major questions presented at the beginning of the thesis, looking at interrogative licensing, discourse in semantics and discourse in syntax. Furthermore, we have now seen based on the Scots data that there is a clear link between the four non-canonical question constructions. Glasgow Scots *-int* is limited to polar rhetorical questions, interrogative exclamatives and tags, while the Shetland dialect particle *-n* is available in all four constructions and no other contexts for older speakers, but moving towards the same pattern of use as Glasgow Scots *-int* for younger speakers. I have thus demonstrated that there are particles which are limited to the relevant non-canonical questions, and this suggests a number of things about the relationship between the constructions:

- i) There is a closer relationship between the four constructions than has generally been proposed in the literature, supporting the recent claims of Gaertner and Gyuris (2017) and Biezma and Rawlins (2017) that all interrogatives are in some way biased, as well as the framing of Sudo (2013) that (polar) interrogative formation occurs as a result of a combination of speaker beliefs and evidential biases. From the Scots data it seems that the bias expressed in the four constructions investigated in this research is expressed in the same way (separate from other interrogative constructions), as seen in the older speakers in Shetland. In the Scots varieties, there has been reanalysis and

specialisation of two particles to incorporate a third factor (the speaker's belief about the addressee's belief), as seen in Glasgow and the younger speakers in Shetland. However, I propose that the non-specialised variants (so verb-subject-*no* in Scots and high *-n't* negation in standard English) are contributing the same semantics to all four constructions, rather than requiring separate analyses.

- ii) In particular, the analysis I give for the Scots data predicts that polar rhetorical questions should not receive the same analysis as rhetorical *wh*-questions cross-linguistically. I discuss this in detail in chapter 6.
- iii) The evidence of reanalysis of the particles from biased questions to tag questions (with a preference for neutral evidential contexts) suggests that speakers will have a preference for tag questions in neutral contexts in English, despite the fact that biased questions are also available according to the literature (Ladd 1981, Domaneschi et al. 2017). I discuss this next, in chapter 5.

## Chapter 5

# Biased questions and tag questions: contextual preferences?

### 5.1 Introduction

In chapter 3 we saw that there appears to be change ongoing from use of particle  $-n$  in Shetland dialect as an acceptable marker in non-canonical questions quite generally, to something which is only acceptable in polar rhetorical questions, interrogative exclamatives and tag questions, and which is preferred in neutral evidential contexts over negative ones. There is a loss of acceptability of  $-n$  in matrix biased questions. This is generally interesting as biased questions and canonical tag questions are often taken to be the same construction syntactically (Sailor 2011, Malamud and Stephenson 2014, Krifka 2015) and semantically (van Rooij and Šafářová 2003, Sailor 2011, Krifka 2015), and are argued to be available in the same contexts.

In this section, I test the hypothesis that the availability of matrix biased questions and tag questions is affected by the evidential context for non-Scottish English speakers. I present the results of a forced choice task run through Qualtrics, where participants were presented with a situation that involved a belief  $p$  and established an evidential context (whether neutral or  $\neg p$ ) surrounding the interaction. Participants were then asked to choose whether they would prefer to produce a matrix biased question or a tag question in these contexts.

I also present the results of a second version of the experiment carried out with native German speakers, presenting a forced choice between matrix biased questions and invariant *oder* tags. While invariant tags are perhaps more clearly ‘different’ from matrix biased questions (certainly, they are not VP-elided versions of the construction), *oder* tags

are also attested as preferred in the same contexts as matrix biased questions in German (Scheffler 2015), and so there is still clear potential for comparison. There is thus also the potential to shed light on the broader question of evidential bias and how it relates to question production cross-linguistically, relating back to the initial big questions of the thesis.

In the discussion, I show how the English results fall out from the analysis I presented in chapter 4. I then compare the English and German data to think more broadly about question bias and how we model beliefs and evidential bias, along the lines of Sudo (2013), Yang and Wiltschko (2016), Domaneschi et al. (2017) and Gaertner and Gyuris (2017).

## 5.2 Experiment 1 – English

### 5.2.1 Motivation

In chapters 1 and 4, I summarised the literature on the distribution of biased questions and tag questions in English. Throughout this thesis, I have taken the position that it is a combination of the epistemic belief of the speaker and the evidential bias of the discourse context that licenses these constructions (see section 4.3). In brief, the literature showed that both constructions exhibit bias in favour of  $p$  on the part of the speaker, and both constructions are available in both neutral evidential contexts (where there is no evidence for or against  $p$ ) and negative evidential contexts (where there is evidence challenging  $p$ ) (Ladd 1981, Buring and Gunlogson 2000, Romero and Han 2004, Sudo 2013, Domaneschi et al. 2017, Gaertner and Gyuris 2017).

(337) S believes there is a vegetarian restaurant in the town that he is visiting A in.

A: You want to go get something to eat?

S: Yeah. Isn't there a vegetarian restaurant around here?

There's a vegetarian restaurant around here, isn't there?

(338) S believes there is a vegetarian restaurant in the town that he is visiting A in.

A: We should get something to eat, but I don't think there will be much for you around here.

S: Isn't there a vegetarian restaurant around here?

There's a vegetarian restaurant around here, isn't there?

(adapted from Ladd 1981:164)

Experimentally, work from Domaneschi et al. (2017) and Sailor (2013) has shown

	epistemic belief	evidential bias
Isn't Paul a vegetarian?	positive	-positive
Is Paul <b>not</b> a vegetarian?	none	+negative

Table 5.1: Negation forms in English biased questions by epistemic belief and evidential bias, following the results in Domaneschi et al. (2017).

	epistemic belief	evidential bias
falling tag question	positive	-negative
rising tag question	positive	+negative

Table 5.2: English reverse polarity tag questions by epistemic belief and evidential bias, extending Sudo (2013) based on Ladd (1981) and Reese and Asher (2006).

that different forms of matrix questions are preferred based on the epistemic bias/evidential belief relationship (see Table 5.1 for an overview). Ladd (1981) and Reese and Asher (2006) claim that the different intonation patterns on canonical tag questions in standard English also align with different evidence and belief patterns, as seen in Table 5.2. The division of labour in tag question forms is different to the division in the form of negation between biased questions and true negative questions. However, it is notable that tag questions and biased questions are both available in evidential contexts that are [+negative] and evidential contexts that are [-negative, -positive] (neutral). Given the direction of the reanalysis we see taking place in the Shetland dialect *-n* data, and given that there are within-context preferences for different interrogative forms depending on the evidential context and epistemic biases in standard English, we might expect there to be preferences in when biased questions and tag questions are available in standard English, despite the fact that they overlap in possible contexts.

The null hypothesis, therefore, is that there would be no difference in speakers' production of biased questions and canonical tag questions depending on evidential context. The alternative hypothesis is that there will be some preference regarding which construction is used in either evidential context. Following the Scots data, I hypothesise that tag questions are preferred in neutral evidential contexts, and that matrix biased questions are preferred in negative evidential contexts.

### 5.2.2 Methodology

I set up a short forced choice experiment using Qualtrics. In the test cases, participants were presented with a short, 1-2 line context that established a) a situation; b) a belief  $p$  for the participant; c) whether the evidential context was negative or neutral. After



reading that short context, participants were asked to choose between a biased question or a tag question that they would produce following the given context. Of course, there may be other possibilities that speakers employ in any given situation – however, for the purposes of this experiment, a forced choice task was most appropriate.

All the tag questions were canonical constructions consisting of an auxiliary verb combined with *-n't* negation and a subject, e.g. *isn't it*. Intonation was not indicated, meaning that the tag should be possible in either context. All matrix biased questions used high *-n't* negation, following the results of Domaneschi et al. (2017). Again, intonation was not indicated. All stimuli can be seen in Appendix B.

(339) **Neutral evidential context:**

You want to go and see the new Harry Potter film. A group of our friends went last week, and you're pretty sure I went with them. You want to find out what I thought of it, so you say:

- Haven't you seen it?
- You've seen it, haven't you?

(340) **Negative evidential context:**

You think I won the marathon at the weekend. However, I start telling you that I am disappointed with my performance. You say:

- Didn't you win the race?
- You won the race, didn't you?

Participants were presented with 10 examples where a belief, *p*, was presented followed by a neutral evidential context, and 10 examples where a belief *p* was followed by a negative evidential context. There were therefore 20 test cases, plus 30 filler examples in which participants made forced choices between e.g. a true negative question and a biased question, or a tag question with a negative anchor and a true negative question. The order of the contexts was randomised, and within each context the two potential responses were randomised, so no participant saw the contexts or responses in the same order.

The experiment took between 10 and 15 minutes to complete.

In this experiment, you will be presented with short (1-2 line) contexts, followed by two sentences.

For each example, please **read the context**, and then select the **sentence you would be most likely to produce in that situation**.

There will be 50 contexts in total. The task should take about **15 minutes**.

If you have any questions, please contact me [e.jamieson@sms.ed.ac.uk](mailto:e.jamieson@sms.ed.ac.uk) or my supervisor, Caroline Heycock, [caroline.heycock@ed.ac.uk](mailto:caroline.heycock@ed.ac.uk).

The screenshot shows the experiment interface. At the top right is a blue button with '>>'. Below it, the instructions are displayed. The first example context is: 'A friend of ours has just said she is going to pick up her new pet. You are pretty sure it is a dog, and you say:'. Below this are two input boxes: 'She's getting a dog, isn't she?' and 'Isn't she getting a dog?'. The second example context is: 'You think our friend is in a relationship. However, I tell you that she said she was going on a date last night. You say:'. Below this are two input boxes: 'Hasn't she got a boyfriend?' and 'She's got a boyfriend, hasn't she?'. At the bottom of the interface are two blue buttons with '>>'.

Figure 5.1: The instructions presented to the participants in Qualtrics, as well as examples of a neutral evidential context and a negative evidential context that participants judged.

### 5.2.3 Participants

Participants were recruited through official channels at the University of Edinburgh, as well as through shared posts on Facebook and Twitter. The only requirements were that the participant was over 18 years old and was a native speaker of English not from Scotland. As discussed in detail in chapter 2, Scottish English speakers use *-na(e)* as reduced form negation rather than *-n't*. *-na(e)* is not able to be used in interrogatives (Millar and Brown 1979, Thoms et al. 2013). Instead, speakers of Scottish English use low *no* negation in both true negative questions and biased questions, rather than following the *-n't/not* divide exhibited by standard English speakers in Domaneschi et al.'s (2017) work. The materials were thus not suitable for Scottish participants, and they were not invited to take part in the study.

138 participants filled out the survey. 25 of those were incomplete; excluding the incomplete surveys left 113 complete responses.

Participants were asked to provide three pieces of demographic information: their age, their gender and where they grew up. All three pieces of information are relevant to potential variation in the results. Tottie and Hoffman (2006) find in their corpus study that older speakers use more canonical tag questions than younger speakers<sup>67</sup>. Lakoff (1973)

claims that women use more tag questions than men (though this claim was subsequently disputed in Cameron et al. (1988), who present evidence suggesting that if anything, men use more tag questions than women). Finally, Tottie and Hoffman (2006) also find that British English has more canonical tag questions than American English, and thus location may be relevant.

The mean age of participants in the English experiment was 29.73. The age, gender and location distribution of participants can be seen in Tables 5.3, 5.4 and 5.5.

Age						
18-19	20-29	30-39	40-49	50-59	60-69	Total
3	69	30	6	2	3	113

Table 5.3: Age distribution of participants in the English experiment.

Gender				
Female	Male	Other	Not given	Total
72	34	6	1	113

Table 5.4: Gender distribution of participants in the English experiment. Other genders given were agender, genderqueer and non-binary.

Location				
Australia	UK & Ireland	USA & Canada	Other	Total
10	61	38	4	113

Table 5.5: Countries of origin of participants in the English experiment. Other locations given were Cyprus, Singapore and South Africa.

## 5.2.4 Results

The raw data was downloaded from Qualtrics and stored in .csv format. All analyses were carried out in RStudio (RStudio Team 2015).

In order to test the three sociolinguistic factors, I ran a binominal multiple logistic regression with fixed effects for evidential context as well as potential sociolinguistic effects: gender and location. Age was input as a random effect due to the uneven spread of ages across the participant pool. The model, shown in Figure 5.2, showed that evidential context was a significant predictor for whether a participant chose a biased question or a tag question. None of the sociolinguistic factors were significant predictors of participants' behaviour.

I used chi-square tests to investigate the results for each evidential context.

<sup>67</sup>Tottie and Hoffman point out that it is unlikely that younger speakers are losing tag questions, but that invariant examples are perhaps becoming more popular (e.g. *innit* in Multicultural London English (Andersen 2001)).

```

Random effects:
Groups Name      Variance Std.Dev.
AGE (Intercept) 0.0884  0.2973
Number of obs: 2260, groups: AGE, 29

Fixed effects:
              Estimate Std. Error z value Pr(>|z|)
(Intercept)  -0.79672   0.19697  -4.045 5.24e-05 ***
EVIDENCEneutral  2.13965   0.09916  21.578 < 2e-16 ***
GENDERZM       0.04598   0.11758   0.391  0.696
GENDERZOther   -0.13816   0.21190  -0.652  0.514
LOCATIONZOTHER   0.20321   0.32557   0.624  0.533
LOCATIONZUKI     0.06681   0.19663   0.340  0.734
LOCATIONZUSA    -0.26287   0.20318  -1.294  0.196
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Correlation of Fixed Effects:
              (Intr) EVIDEN GENDERZM GENDERZO LOCATIONZO LOCATIONZUK
EVIDENCEintr -0.238
GENDERZM      -0.255  0.027
GENDERZOthr  -0.034 -0.008  0.119
LOCATIONZOT    -0.506  0.032  0.032  0.035
LOCATIONZUK    -0.840  0.024  0.086  -0.076  0.536
LOCATIONZUS    -0.794 -0.007  0.007  -0.002  0.508  0.826

```

Figure 5.2: Multiple logistic regression model for choice between biased question and tag question in English. There was a significant effect of evidence (either negative or neutral), but no further effects.

	TQ	BQ
Neutral	882 (78.05%)	248 (21.95%)
Negative	344 (30.44%)	786 (69.56%)

Table 5.6: Raw numbers of tag questions vs biased questions across evidential contexts in English

### Neutral evidential contexts

My hypothesis predicted that in English examples like (339), where there is no negative evidence challenging the speaker’s prior belief  $p$ , participants would choose to produce a tag question over a matrix biased question. This hypothesis was strongly supported (see Figure 5.3). A chi-square test gives  $\chi^2 = 355.71$ ,  $df = 1$ ,  $p < .001$ .

### Negative evidential contexts

My hypothesis predicted that in English examples like (340), where there is negative counterevidence challenging the speaker’s prior belief  $p$ , participants would choose to produce a matrix biased question over a tag question. This hypothesis was strongly supported (see Figure 5.3). A chi-square test gives  $\chi^2 = 172.89$ ,  $df = 1$ ,  $p < .001$ .

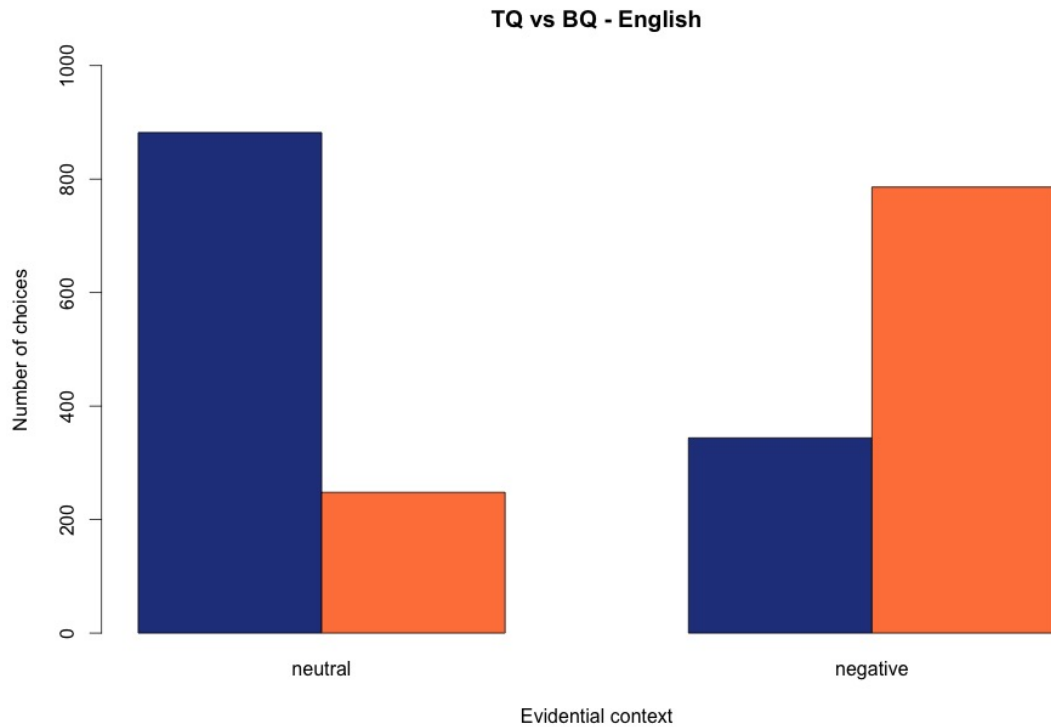


Figure 5.3: Choice of biased question or tag question by evidential context in the English experiment – TQ represented in dark blue, BQ represented in orange.

### Individual variation

It was not the case that certain participants consistently chose one variant over the other across contexts: though some participants were consistent within one of the contexts, no participant was consistent across both contexts. Even within contexts, consistency was rare: around 14% of participants selected only tag questions in neutral contexts, and around 7% of participants only selected biased questions in negative contexts.

	All tag questions	All biased questions
Neutral evidential contexts	16	
Negative evidential contexts		8

Table 5.7: Numbers of participants in the English experiment who consistently selected one of the variants in each context.

## 5.3 Experiment 2 – German

### 5.3.1 Motivation

I gave an overview of the literature for biased questions and tag questions in English in chapters 1 and 4. There has also been some discussion of German biased questions and tag questions that shows the same sort of patterning based on epistemic belief and evidential bias. I will briefly overview that literature here.

#### Matrix biased questions

Büiring and Gunlogson (2000) give the first discussion of biased questions in German, arguing that there is a morphological distinction between negative questions and biased questions. Generally, a sentence with a negative + indefinite combination in German would require use of the negative indefinite marker, *kein(e)*. Büiring and Gunlogson show that this is the case in negative questions where the speaker is not biased by any prior belief (in other words, a true negative question) (e.g. (341), reproduced from their article). On the other hand, in contexts where a speaker has a prior epistemic belief, *p*, about the indefinite and wants to produce a biased question regarding this belief, speakers use the combination *nicht ein(e)* rather than the negative indefinite (e.g. (342)).

(341) *Gibt es kein vegetarisches Restaurant in dieser Ecke?*  
gives EXPL NEG.INDEF vegetarian restaurant in this corner  
'Is there no vegetarian restaurant around here?'

(342) *Gibt es nicht ein vegetarisches Restaurant in dieser Ecke?*  
gives EXPL NEG INDEF vegetarian restaurant in this corner  
'Isn't there a vegetarian restaurant around here?'

(German, Büiring and Gunlogson 2000:4)

Domaneschi et al. (2017) tested this in the lab with 42 native German speakers. They found a clear preference for *nicht ein(e)* questions in situations where the speaker had a prior epistemic belief *p*, and there was either a neutral or negative evidential context. On the other hand, *kein(e)* questions were preferred in situations where the speaker had no prior epistemic belief, and was presented with a negative evidential context<sup>68</sup>.

<sup>68</sup>As in the English data, positive interrogatives were used when speakers had no prior epistemic belief, and were presented with either neutral or positive evidence.

<sup>69</sup>There was a higher proportion of *kein(e)* questions in negative evidential contexts than low negation *not* in English negative evidential contexts. Domaneschi et al. (2017) take this as evidence that *kein(e)* can be used when the speaker has an epistemic belief *p* and a negative evidential context. They suggest that this distinction in use lines up with the different intonation patterns found in English biased questions. However, *nicht ein(e)* was clearly preferred overall, and they do not discuss the within-context distribution of *kein(e)*. I thus set this possibility aside.

	epistemic belief	evidential bias
<i>nicht ein(e)</i>	positive	-positive
<i>kein(e)</i>	none <sup>69</sup>	+negative

Table 5.8: Negation forms in German biased questions by epistemic belief and evidential bias, following the results in Domaneschi et al. (2017)

## Tag questions

Unlike English, German does not have canonical tag questions. As is common cross-linguistically, tag questions in German are expressed through a variety of invariant tag particles.

Early accounts of German tag questions cited dialect variation as the main point of variation in the distribution of different tag question forms (e.g. Mills (1981)). However, Scheffler (2015) carried out a corpus study of German speakers' tag question use on Twitter. Though she did not account for dialect variation, she did find clear results based on evidential context, which were sharpened by looking at co-occurring discourse particles in the anchor of the tag.

Invariant tag *oder* most commonly co-occurs with discourse particle *doch*. *Doch* serves the function of reopening a previous Question Under Discussion (QUD) (Rojas-Esponda 2013, Grosz 2014) and can be stressed or unstressed. In positive tag question anchors it is generally unstressed. The precise role of unstressed *doch* in tag questions is not clearly stated in the literature. However in standard assertions, unstressed *doch* signals that *p*, indicated by the proposition, is common knowledge i.e. should be in CG. As shown by Rojas-Esponda (2013), there are two contexts in which unstressed *doch* can be used in assertions: firstly, examples with direct propositional contrast where the speaker wants to tell the addressee that what they have just said is incompatible with the information that previously resolved this issue (response (i)), and secondly, examples where the sentence is used to contradict something by suggesting that it is superfluous, because it is given by some other previous knowledge (response (ii)).

(343) *Sabine ist heute Morgen joggen.*  
 Sabine has this morning jogging  
 'Sabine went jogging this morning.'

i) *Sabine ist DOCH um drei Uhr heute Nachmittag aufgewacht.*  
 Sabine has DOCH at 3pm this afternoon woken up  
 'Sabine DOCH woke up at 3pm this afternoon.'

- ii) *Sabine geht DOCH jeden Morgen joggen.*  
 Sabine goes DOCH every morning jogging  
 ‘Sabine DOCH goes jogging every morning.’

(German, Rojas-Esponda 2013:372)

Though *doch* in tag questions does not require this same contradictory context, it does share some features with the plain assertive *doch*. It retains the flavour of indicating that *p* is something that the speaker believes should be a shared belief between themselves and the addressee, and thus should already be part of CG. It is also relevant to a salient QUD<sup>70</sup>. I take it that this indicates that the speaker’s degree of belief in *p* is relatively high, and that the speaker believes the addressee’s degree of belief should be, firstly, towards *p*, and secondly, also relatively high.

Returning to *oder*, then, Scheffler’s results showed that *oder* was the most common tag overall (86.9% of all tags), and was generally preferred when some sort of contextual evidence has ‘made the speaker unsure’ of their belief of *p*. Scheffler does not distinguish between neutral and negative evidential contexts, and *oder* seems to be able to be used in situations that permit both rising and falling tags in English.

- (344) *Dieses großen 2kg Haribo-Tonnen kaufen ist doch auch eine*  
 this big 2kg Haribo-tub buy is PRT also an  
*Geisteskrankheit, oder?*  
 insanity TAG  
 ‘Buying this 2kg Haribo tub is also insane, isn’t it?’

(German, Scheffler 2015)

- (345) *Das ist eine Art Jodeldiplom oder?*  
 that is an art yodelling-diploma TAG  
 ‘That’s pointless, isn’t it?’

(German, Scheffler 2015)

*Oder* is not the only invariant tag in German. According to Scheffler’s data, other invariant tags are also specified for particular bias/belief contexts. In contexts in which there was no counterevidence for the speaker’s belief of *p* and evidence leaning in favour of *p*, speakers preferred to use the invariant tag particle *nä*, which co-occurs with discourse particle *ja*. *Ja* indicates that the speaker is ‘sure’ of *p*, and simply seeks acknowledgment.

- (346) *Also, es gibt echt Menschen, nä?*  
 so there are genuine people TAG  
 ‘So, there are genuine people, aren’t there?’

(German, Scheffler 2015)

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<sup>70</sup>Thanks to Felicitas Enders for discussion on the role of *doch* in tag questions.



	epistemic belief	evidential bias	discourse particle
<i>nä</i>	positive	+positive	<i>ja</i>
<i>oder</i>	positive	-positive	<i>doch</i>

Table 5.9: German invariant tag particles by epistemic belief and evidential bias, extending Sudo (2013).

(347) *Mama denkt ich bin schwanger weil ich Stimmungsschwankungen*  
 Mama thinks I am pregnant because I mood-swings  
*habe. IST JA VOLLKOMMEN UNNORMAL INNER PUBERTÄT NÄ?*  
 have is PRT totally uncommon during puberty TAG  
 ‘Mama thinks I am pregnant because I have mood swings. They’re totally  
 uncommon during puberty, aren’t they?!

(German, Scheffler 2015)

So, while *oder* seems to be able to be used in situations that both rising and falling tags can in English, *nä* is reserved for a situation where English could only use a nuclear tag.

These are not the only particles available for German speakers to use as tags; however, Scheffler’s corpus data suggests that other tag forms are used in small numbers. I will leave this matter aside, simply noting that certain tags are preferred in certain evidential bias contexts in German, and return to focus on *oder*.

We have seen that biased questions and invariant tag particle *oder* are available in the same contexts: [-positive] (so, both [-positive, -negative] and [+negative]). The null hypothesis is that there should be no difference in the acceptability of matrix biased questions and *oder* in neutral and negative evidential contexts in German, given that matrix biased questions with *nicht ein(e)* and *oder* tags are both licensed in [-positive] evidential contexts. Following the English results, the alternative hypothesis is that tag questions will be preferred in neutral contexts, and biased questions in negative contexts.

### 5.3.2 Methodology

As with the English experiment detailed in section 5.2.2, I set up a short forced choice experiment using Qualtrics. Participants were presented with a short, 1-2 line context that established a) a situation; b) a belief  $p$  for the participant; c) whether the evidential context was negative or neutral. After reading that short context, participants were asked to make a choice between a biased question or a tag question that they would produce following the given context. Of course, there may be other possibilities that speakers

employ in any given situation – however, for the purposes of this experiment, a forced choice task was most appropriate.

In order to be as comparable as possible, the German version of the experiment was translated from the original English materials by a native speaker, and checked by a second native speaker<sup>71</sup>. Some minor changes were made in order to make the materials more suitable; however, as far as possible, the materials were direct translations.

All tags were given as *oder*, given that this is the most common tag across German varieties, and is preferred in situations with neutral and/or negative evidential contexts. The discourse particle *doch* was also included in all the examples on recommendation from native speakers regarding the frequency with which *oder* co-occurs with *doch*.

All biased questions were presented with *nicht*. There were a mixture of examples with indefinites and without. Those without indefinites simply displayed *nicht*; those with presented *nicht ein(e)* and not *kein(e)*, again following the results of Domaneschi et al. (2017) – and setting aside the potential availability of *kein(e)* in biased questions. Unstressed *doch* is not permitted in matrix questions (including matrix biased questions), and so was not included in the biased question examples. All stimuli can be seen in Appendix B.

(348) **Neutral evidential context:**

Wir gehen in ein Konzert. Du hast noch kein Ticket, aber du bist dir ziemlich sicher, dass du an der Abendkasse noch eins bekommen wirst. Du sagst:

*‘We are going to a concert. You haven’t got a ticket yet, but you are pretty sure you can get one at the venue, so you say:’*

- *Kann man nicht an der Abendkasse noch ein Ticket kaufen?*  
can one not at the box office still a ticket buy  
*‘Can’t you get a ticket at the box office?’*
- *Man kann doch an der Abendkasse noch ein Ticket kaufen, oder?*  
one can DOCH at the box office still a ticket buy TAG  
*‘You can buy a ticket at the box office, can’t you?’*

(349) **Negative evidential context:**

Du glaubst, dass unsere Freundin nur eine Katze als Haustier hat. Ich erwähne, dass ich sie mit ihrem Hund Gassi gehen sah. Du sagst:

*‘You believe that our friend only has a cat for a pet. However, I tell you that I saw her out walking her dog. You say:’*

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<sup>71</sup>Thanks to Mirjam Eiswirth and Ulrich Stoyke for their help with translation.

- *Hat sie nicht eine Katze?*  
has she not a cat  
'Hasn't she got a cat?'
- *Sie hat doch eine Katze, oder?*  
she has DOCH a cat, TAG  
'She's got a cat, hasn't she?'

As with the English experiment, participants were presented with 10 examples in which the participant was given a belief,  $p$ , followed by a neutral evidential context, and 10 examples in which the participant was given a belief  $p$ , followed by a negative evidential context. There were therefore 20 test cases, plus 30 filler examples in which participants made forced choices between e.g. a true negative question and a biased question, or a tag question with a negative anchor and a true negative question. The order of the contexts was randomised, and within each context the two potential responses were randomised, so no participant saw the contexts or responses in the same order.

The experiment took between 10 and 15 minutes to complete.

### 5.3.3 Participants

Participants were recruited through official channels at the University of Edinburgh and Universität Konstanz, as well as through shared posts on Facebook and Twitter. The only requirements for participation were that the participant was over 18 years old and was a native speaker of German.

61 participants filled out the survey. 7 of those were incomplete; excluding the incomplete surveys left 54 complete responses.

For comparison with the English data, participants were asked to provide the same demographic information: age, gender and location where they grew up. Tables of the demographic information are available below (Tables 5.10, 5.11, 5.12).

Age						
18-19	20-29	30-39	40-49	50-59	60-69	Total
1	33	14	4	2	0	54

Table 5.10: Age distribution of participants in the German experiment; mean age was 30.

Gender				
Female	Male	Other	Not given	Total
36	18	0	0	54

Table 5.11: Gender distribution of participants in the German experiment.

Location			
Austria	Germany	Switzerland	Total
12	40	2	54

Table 5.12: Countries of origin of participants in the German experiment.

```

Random effects:
  Groups Name      Variance Std.Dev.
AGE (Intercept) 0.02847 0.1687
Number of obs: 1080, groups: AGE, 21

Fixed effects:
              Estimate Std. Error z value Pr(>|z|)
(Intercept)  -0.67480    0.17360  -3.887 0.000101 ***
EVIDENCEneutral 1.81740    0.13773  13.195 < 2e-16 ***
GENDERZM      0.04098    0.14847   0.276 0.782548
LOCATION2GER    0.10716    0.16131   0.664 0.506500
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Correlation of Fixed Effects:
              (Intr) EVIDEN GENDER
EVIDENCEentr -0.327
GENDERZM     -0.347 -0.001
LOCATION2GE   -0.750 -0.002  0.061

```

Figure 5.4: Multiple logistic regression model for choice between biased question and tag question in German. There was a significant effect of evidence (either negative or neutral), but no further effects.

### 5.3.4 Results

The raw data was downloaded from Qualtrics and stored in .csv format. All analyses were carried out in RStudio (RStudio Team 2015).

In order to test the three sociolinguistic factors, I ran a binominal multiple logistic regression with fixed effects for evidential context as well as potential sociolinguistic effects: gender and location. Age was input as a random effect due to the uneven spread of ages across the participant pool. The model (see Figure 5.4) showed that evidential context was a significant predictor for whether a participant chose a biased question or a tag question. None of the sociolinguistic factors were significant predictors of participants' behaviour.

I used chi-square tests to investigate the results for each evidential context.

#### Neutral evidential contexts

My hypothesis predicted that in German examples like (348), where there is no negative counterevidence challenging the speaker's prior belief,  $p$ , participants would choose to

	TQ	BQ
Neutral	416 (77.04%)	124 (22.96%)
Negative	192 (35.56%)	348 (64.544%)

Table 5.13: Raw numbers of tag questions vs biased questions across evidential contexts in German

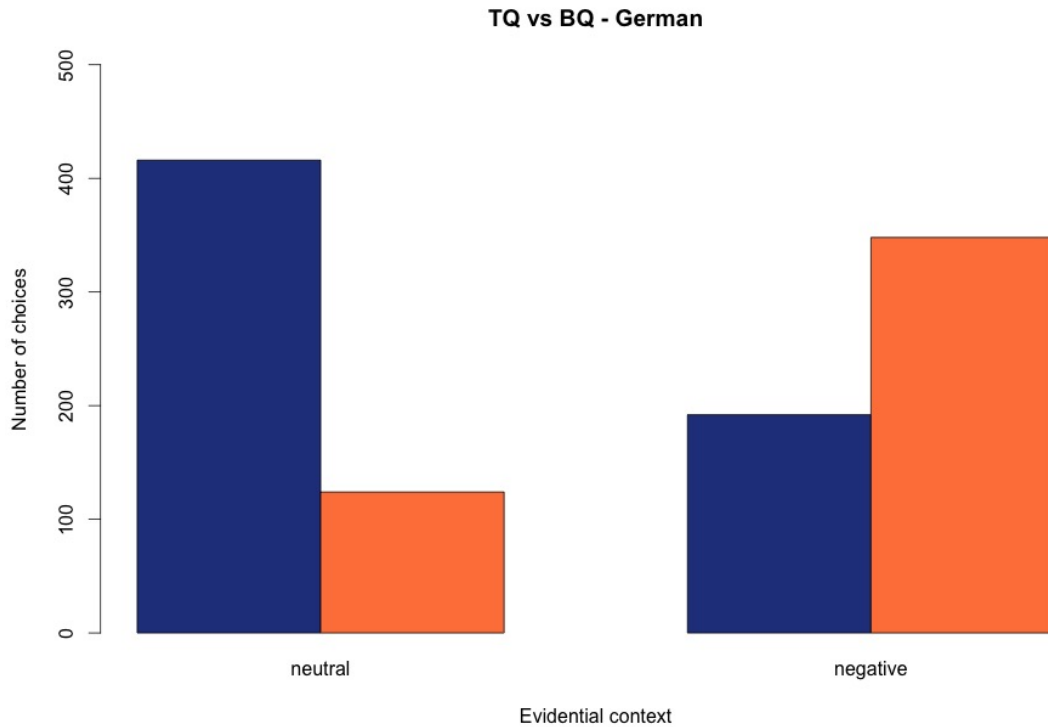


Figure 5.5: Choice of biased question or tag question by evidential context in the German experiment – TQ represented in dark blue, BQ represented in orange.

produce a matrix biased question over a tag question. This hypothesis was strongly supported (see Figure 5.5). A chi-square test for goodness of fit gives  $\chi^2 = 157.9$ ,  $df = 1$ ,  $p < .001$ .

### Negative evidential contexts

My hypothesis predicted that in German examples like (349), where there is negative counterevidence challenging the speaker's prior belief  $p$ , participants would choose to produce a matrix biased question over a tag question. This hypothesis was strongly supported (see Figure 5.5). A chi-square test for goodness of fit gives  $\chi^2 = 45.067$ ,  $df = 1$ ,  $p < .001$ .

## Individual variation

As with the English data, individuals in the German experiment made varied choices across contexts: it is not the case that certain participants were strongly in favour of one variant over the other. No one selected one type of construction across the board. 11% of participants selected tag questions in all of the neutral examples: however, across the negative evidential context, every participant had a mix of biased question and tag question responses.

	All tag questions	All biased questions
Neutral evidential contexts	6	
Negative evidential contexts		

Table 5.14: Numbers of participants in the German experiment who consistently selected one of the variants in each context

## 5.4 Crosslinguistic results summary

In both experiments detailed above, speakers strongly preferred to produce biased questions in negative evidential contexts, and tag questions in neutral evidential contexts. However, as noted in sections 5.2.4 and 5.3.4, very few participants were consistent in their preference for one form (even within a context). Also worth noting, as shown in Figure 5.6, is that there is variation in choice to some extent between individual examples. In neutral contexts, English and German seem to follow a very similar pattern across examples, though there is a little more variation in the negative contexts<sup>72</sup>. Looking at the individual examples (see Figure 5.6), I take this as evidence for the idea of bias as a scalar phenomenon, with participants exhibiting *preferences* rather than either form being mandatory in either context – thus supporting a bias model like that of Gaertner and Gyuris (2017) rather than that of Northrup (2014), in which the choice between biased question or tag question is decided by the evidential context. This will be discussed in more detail in the following section.

## 5.5 Discussion

In sections 5.3 and 5.4, I presented the results of two experiments which showed that, despite both matrix biased questions and tag questions being available in both neutral and

<sup>72</sup>Though the examples were translated by native speakers, I accept that the effect of translation may have had an effect on the German responses. Similarly, it is possible that some indefinites in the negative evidential contexts may have preferred *kein(e)*. Further research is required on the full distribution of *kein(e)* in negative evidential contexts.

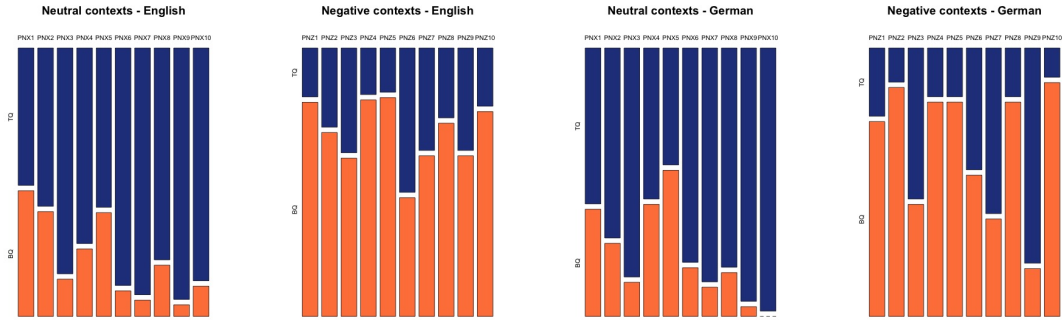


Figure 5.6: Results by individual context in English and German, with each bar representing one example. Orange indicates proportion of biased questions chosen; blue indicates proportion of tag questions chosen.

negative evidential contexts, speakers have preferences about which construction should be used in which evidential context. Specifically, speakers of both English and German preferred matrix biased questions in negative evidential contexts, challenging the speaker’s belief of  $p$ . They also preferred tag questions (whether canonical or invariant) in neutral evidential contexts, where nothing was challenging  $p$ .

There are three important parts of the results presented in sections 5.3 and 5.4 that need to be accounted for. Firstly, the overall preferences that can be seen in Figures 5.3 and 5.5; biased questions were preferred in negative evidential contexts and tag questions were preferred in neutral evidential contexts. Secondly, however, it is not the case that this is unanimous in any way; depending on the exact example there was variation in the proportions of biased questions and tag questions chosen. It therefore cannot be the case that the construction is determined exclusively by the evidential context. Finally, the choice of biased question or tag question in the German data patterns very closely to the English data<sup>73</sup>. Although I generally argue against Farkas and Roelofsen (2017) and their analysis of the semantics of tag questions, I believe that this evidence from English and German supports their idea that in biased and tag question production, there is an aspect of *credence* of belief involved, and that the ability of the speaker to have strong credence in their belief of  $p$  will affect what construction the speaker chooses to produce. I will discuss this further below.

I will focus firstly on the English results and show how they fall out from the analysis

<sup>73</sup>The clear exception to this generalisation is the example in PNZ9, where German participants opted for a tag question over a biased question. This goes against the general pattern found in German, and opposes the results found in the English data for the same context. In this particular context, there may have been a strong effect of translation.

I proposed in chapter 4. I will not discuss the German results in detail<sup>74</sup> but I will return to them for a broader discussion of beliefs and biases in section 5.5.3.

### 5.5.1 Overall preferences

The overall results just presented fall out from the analysis of tag questions I presented in chapter 4.3. Recall that I began from the starting point of Reese and Asher (2006), in which tag questions are not singular complex speech acts but rather their interpretation is derived from the interaction between the anchor and the tag. The tag's anchor is an assertion in which the speaker puts forward that they are willing to take responsibility for  $p$  with the underlying goal that the addressee will also accept  $p$  as a belief – and thus that  $p$  will be added to the Common Ground. From the assertion, then, the addressee can infer that the speaker has a belief of  $p$ . I treat the canonical English tag question semantically as a question which has undergone VP-elision. For Reese and Asher (2006), a question  $q$  means that the speaker believes an answer to the question; however, the important point which holds regardless of which question semantics one subscribes to, is that by pushing  $p$  on to the QUD stack in the tag's anchor, the speaker has already indicated what the Known Answer to the question is. For example, in (350), the speaker indicates that 'he is going to be late' is the answer to the question presented in the tag.

(350) He's going to be late, isn't he?

By combining with falling intonation then, which indicates a lack of contingency (Gunlogson 2008), the speaker is able to in effect take responsibility for  $p$ , using the tag to signal that the addressee's opinion is desirable, but without making the discourse continuation reliant on it. This accounts for the various pragmatic phenomena discussed in chapter 4.2. Recall also that I argued that biased questions do not present the same sort of Known Answer as tag questions, arguing against accounts which present them as the same sort of complex speech act (Krifka 2015), and rather suggesting that these are

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<sup>74</sup>For what it is worth, in terms of *oder*, I believe it has similar syntactic and semantic behaviour to a confirmational marker like *right* and *huh*. For example, it appears that *oder* behaves like confirmational marker *right* with regards to discourse closure. German *also* behaves like English *so* with regards to marking an inference between propositions in 'recipient-orientated' contexts (see section 4.2.3 for discussion on the English data).

- i) Es ist doch ein schöner Tag, oder? Also sollten wir zum Strand gehen.  
*It is PRT a nice day, TAG? So we should go to the beach.*
- ii) David trinkt doch Weißwein, oder? Also werde ich Weißwein für die Party kaufen.  
*David drinks PRT white wine, TAG? So I'll buy white wine for the party.*

In both cases, it is acceptable to have *also* at the beginning of the second proposition in order to create a link and continue the need for confirmation into the second proposition. Special thanks to Mirjam Eiswirth for discussion of this point and judgments; I leave the details for future research.



true questions (regardless of the bias that they present) which require a true answer or confirmation from the addressee, rather than simple acknowledgment.

This straightforwardly explains the results seen in the above section. In neutral evidential contexts where the speaker has a belief of  $p$ , it is more *relevant* (Sperber and Wilson 1995) for them to take responsibility for the proposition by asserting it. The tag question is a question, but the speaker, firstly, has made their impression of the answer known in the anchor, and secondly has not made the utterance contingent on the addressee – therefore, the addressee is included and the speaker may in fact want them to back up their utterance, but it is not necessary for the continuation of the discourse.

Alternatively, when there is some counterevidence challenging the speaker’s belief of  $p$ , the matrix biased question is a more relevant move. In that case, although the speaker has a bias towards  $p$  and a belief that this is the correct answer, they do not have to take responsibility for  $p$  as an assertion on the QUD stack. The discourse cannot proceed until the addressee has cleared up whether  $p$  or  $\neg p$  holds and should be added to the Common Ground. This therefore allows the speaker to take account of the negative counterevidence while still indicating their belief of  $p$  – however one believes that should be modelled in biased questions.

This analysis correctly predicts the facts; furthermore, by focusing on the relevance of the discourse moves, it also does not require claiming that only one construction is available per context, as Northrup (2014) does (see chapter 4.2 for full discussion of Northrup’s model).

### 5.5.2 Variation in selection

If it is simply the case that particular discourse moves are more relevant, we can then ask why biased questions are available at all in neutral contexts? Why are tag questions (with rising intonation) available in negative contexts? Why did certain contexts receive more choices for the ‘most relevant’ construction than others, even within the overall umbrella of ‘negative’ or ‘neutral’ contexts?

The first relevant point, discussed in chapter 1, is that interpretation of evidence is always relative to the speaker and their own background and perspective. In this experiment, then, and in general, it may be that in certain contexts, speakers interpreted the evidence (or lack thereof) in different ways. For example, in neutral evidential context PNX1 (presented in (351)) participants were given a context in which they were discussing a friend who had recently moved. Participants were told they thought the

friend had moved to Berlin, and then were asked to choose between ‘She moved to Berlin, didn’t she?’ and ‘Didn’t she move to Berlin?’.

- (351) We are talking about a friend of ours who recently moved away. You are pretty sure she went to Berlin [bel: *p*]. [ev:  $\emptyset$ ] You say:
- Didn’t she move to Berlin?
  - She moved to Berlin, didn’t she?

This context, which was particularly underspecified in terms of whether there was any evidence challenging or supporting the proposition, was one of the neutral contexts which gathered a higher number of matrix biased question responses (see Figure 5.6). Adding further information to the context can strengthen the preference for one of the constructions over the other; for example, specifying exactly what we were discussing about our friend. If the addressee had said something like ‘She should have learned some German before she left’, this may have indicated that she was at least in Germany; however, if the addressee had made the same statement about French, this would have perhaps challenged the speaker’s assumption to a higher degree. However, even that latter statement would have challenged the speaker less if they believed that the friend’s job required her to speak French. Therefore, the information that the speaker brings to the context will vary and their choice of construction may vary to match that.

Regarding biased questions in neutral contexts specifically, it may be that the choice relates to politeness. Deferring to the interlocutor is a cooperative move and in particular contexts, it may be most polite for the speaker to request more input from the addressee in order to bring them into the conversation. For example, in (183) (repeated here as (352)), the biased question ‘Wasn’t it Ash?’ is the best move for S to make: while the speaker is in a position to take responsibility for *p*, the addressee has put themselves in a vulnerable position by admitting that they cannot remember the name; the speaker can bring them back into the fold by asking a biased question.

- (352) S and A are at a party. They spot someone arriving. S recalls that both they and A had met this person the previous weekend. S believes he is called Ash.
- A:** There’s Rob’s friend. I can’t remember his name!
- S:** Wasn’t it Ash?

While this is a case where the addressee has made it clear that they cannot commit to *p* (‘I can’t remember’), the principles are more broadly applicable; it may be more polite for the speaker to defer to the addressee.

Finally, regarding tag questions with rising intonation. In the literature, these constructions are described as more ‘confirmational’ questions which are posited to occur in contexts where there is counterevidence challenging the speaker’s belief of  $p$  by e.g. Ladd (1981) and Reese and Asher (2006). However, we saw that in general, tag questions are dispreferred in contexts with counterevidence. Furthermore, the analysis of tag questions I posited in chapter 4 suggests that the speaker is presenting a Known Answer in the anchor to the tag. It would be unusual to claim a Known Answer in a situation where the speaker is no longer able to have confidence in the fact of  $p$ . I tentatively suggest that rising intonation tag questions have particular import, specifically relating to the speaker’s *bouletic* bias. Tag questions with rising intonation would therefore be more likely to be used when the speaker has an existing belief of  $p$  and is met by some counterevidence. The speaker’s *desire* for  $p$  to be true is high, and therefore they are likely to take responsibility for the assertion of  $p$  anyway. The negative counterevidence, however, means that they need to defer to the addressee to some extent in order to clarify whether or not their belief is true. This is where the contingency added by the rising intonation on the tag comes in: given the evidential context, the speaker is aware that they cannot take responsibility for  $p$  without further support and/or elaboration from the addressee, but they wish to make their current position (i.e. belief of  $p$ ) clear.

For example, negative context PNZ9 (presented in (353)), a context in which the participant has made dinner, but the addressee looks unhappy and is reluctant to try it, received a relatively high concentration of tag questions responses, despite an overall preference for matrix biased questions in negative contexts.

- (353) You think I would like a really spicy dinner you have made [bel:  $p$ ]. However, I’m pushing it around my plate and looking unhappy [ev:  $\neg p$ ]. You say:
- Won’t you try it?
  - You’ll try it, won’t you?

In this situation, the speaker has put effort into making dinner and hopes the addressee enjoys it. Their bouletic desire for the addressee to try the food is high and thus using a tag question in which presents the Known Answer as ‘you will try it’ is a relevant and even persuasive move.

Similarly in negative evidential context PNZ6 (presented in (354)), the speaker’s desire for  $p$  to be true is important as this move could be construed as trying to reassure the addressee<sup>75</sup>. They are indeed relying on the addressee’s confirmation, but there is

reason to choose the tag question over the biased question.

(354) I am giving an important presentation this year. You think it is a long time away.

However, I tell you that I am feeling extremely nervous about it. You say:

- Isn't it a few months away?
- It's a few months away, isn't it?

This interpretation of rising tag questions in negative evidential contexts can of course only be tentative at this stage. However, it seems that rather than being purely 'confirmational', as the literature might suggest, rising intonation tag questions may have more specific purposes. This also develops the idea of a role for non-epistemic biases in biased question production, briefly mentioned but set aside by Sudo (2013) and Domaneschi et al. (2017). I believe more research looking at the role of bouletic/teleological/deontic biases in non-canonical question formation would be extremely beneficial. Of course, there may still be a role for something like a straightforward confirmation interpretation – I discuss this to some extent in the next subsection.

### 5.5.3 Scolarity of belief

The final interesting piece of the puzzle of results is the fact that the distribution of the variation in the English and German results across contexts patterns very closely, as seen in Figure 5.6. For each individual example, the division of biased questions and tag questions is very similar in the two languages.

I suggest that this supports the idea that biased question production is in some way influenced by the *strength* of belief or contextual evidence. Although both constructions are technically available in either a neutral or negative evidential context (though the intonation may vary in tag questions), it appears that the probability of selecting one or the other construction is at similar rates between the two languages.

Similar ideas about the scolarity or strength of the required belief have been put forward in the literature recently. The idea of *credence* of belief affecting the availability of particular constructions has been put forward by Farkas and Roelofsen (2017), who argue that rising tag questions can be used when a speaker has [medium] or [high] credence in the evidence for *p*, while falling tags are only used when the speaker has [high] credence

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<sup>75</sup>It is possible that this example could be viewed as *teleological* (von Stechow 2006) – rather than *p* being true being part of the speaker's personal desires, it is part of the speaker's wider goals in reassuring the addressee. However, the lines between bouletic/teleological/deontic modality can be fine, with all evaluated against circumstantial modal bases (Hacquard 2011) rather than the speaker's current epistemic state, and so either way it is still distinct from a standard epistemic belief.

for  $p$ . While I argue against Farkas and Roelofsen (2017) in chapter 4.3.5, this particular facet of their argument is especially relevant.

Furthermore, in their paper on Northern Mandarin *ha* tags, Yang and Wiltschko (2016) posit a ‘credibility scale’ which they link to Han’s (2002) idea of ‘informativeness’, stating that ‘the difference between believing  $p$  and not believing  $p$  is often a matter of degree and not a binary distinction’ (Yang and Wiltschko 2016:78). To produce a standard assertion, a speaker must have high credibility in the proposition, i.e. they must believe  $p$  – the speaker’s chance of producing a standard assertion drops as their credibility for  $p$  drops. Yang and Wiltschko (2016) refer to this as the ‘affirmativeness function’. The authors also posit a ‘confirmativeness function’ which is a bell-shaped curve. Confirmativeness increases as affirmativeness decreases until the mid-point of the credibility scale, at which point it reduces as the speaker’s credibility and reason to believe  $p$  decreases. The ‘confirmativeness function’ can be seen in Figure 5.7, with the three relevant tags (*ba*, *dui bu dui* and *ha<sub>1</sub>*) partitioned.

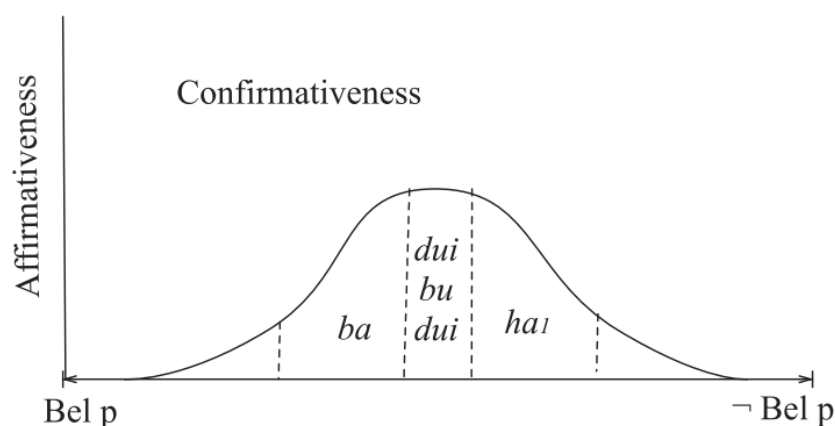


Figure 5.7: The ‘confirmativeness function’ from Yang and Wiltschko (2016:79), demonstrating the space in which the authors posit that confirmatorials are permitted and the particular distribution of the three Northern Mandarin tags.

In Northern Mandarin, then, *ba* is used when the speaker has relatively high credibility in their belief of  $p$  (but is not certain). *dui bu dui*, an A-not-A question, is used when the speaker’s credibility is neither high nor low, while *ha<sub>1</sub>*, the focus of Yang and Wiltschko’s paper, is used when the speaker has low credibility for  $p$ .

It is not entirely clear what the  $y$ -axis in the confirmativeness function figure is meant to represent – I interpret it as strength of belief, given that high credibility refers to a belief of  $p$  over  $\neg p$ ; however, it is therefore unclear what the scalarity of the credibility scale refers to. Furthermore, it is not the case that low credibility for  $p$  would necessarily imply high credibility for  $\neg p$ . I am therefore not convinced by this exact graphing of the

scalarity; however, the underlying point is relevant.

While Yang and Wiltschko separate their curve into sections representing each confirmational particle, it seems to me that it would be perfectly plausible that two confirmational (or biased question types) would overlap somewhat in the sections of belief and evidential bias that they represented – but the probability of choosing one or the other would depend on the strength of the speaker’s belief and the interpreted strength of the evidence, rather than a feature-based system (e.g. Sudo (2013) or Gaertner and Gyuris (2017)) where beliefs and evidence are categorised as either [+ ] or [-], [negative] or [positive].

In the English and German data, then, the belief and evidential bias contexts for biased questions and canonical tag questions or *oder* overlap. However, the constructions are different discourse moves despite their matching pragmatic contexts. Various factors (e.g. background, politeness or bouletic desire) may affect the speaker’s choice of construction, but at some level, the exact strengths of belief or evidential bias would have an effect. This may account for the similarity in the distribution of participants’ choices cross-linguistically when specific evidential contexts are given. I believe this would be a productive avenue for future research and for modelling the overall relationship between question bias and confirmation.

## 5.6 Conclusions

In this chapter I aimed to address the question of whether matrix biased questions and canonical tag questions are equally available in the evidential contexts in which they can be used. I presented the results of an experiment which showed that speakers of English and German prefer to produce biased questions in contexts where there is some counterevidence challenging the speaker’s belief of some proposition  $p$ ; on the other hand, they prefer to produce tag questions in contexts where there is no counterevidence against  $p$ . These results build on the experimental work of Domaneschi et al. (2017) who showed that speakers of English and German prefer to produce different forms of matrix interrogatives in different belief and bias contexts, and the results of Ladd (1981) and Scheffler (2015) who showed that speakers use different tag question forms depending on the belief and bias combination. I showed that although biased questions and tag questions are both available in these contexts, it is not the case that speakers choose to produce them equally across contexts. I also noted from the results that there was variation by specific context within the overall umbrellas of ‘neutral’ or ‘negative’ evidential context.

I explored these results in section 5.5, showing that they follow from the semantics of tag questions (and biased questions) that I posited in chapter 4. With regard to the variation seen across individual contexts, I suggested that this, to some extent, follows from the fact that evidence and belief are always relative to the speaker's own perspectives. However, I also discussed the possibility that biased questions in neutral evidential contexts and tag questions in negative evidential contexts may have specific pragmatic import, specifically relating to politeness or to biases that are assessed relative to circumstantial rather than epistemic modal bases. Finally, I discussed what these results imply for an overall conceptualisation of biased question distribution. I suggested that the fact that the variation in biased question or tag question across individual examples by and large patterns across English and German suggests that a scalar model of belief and bias like that of Yang and Wiltschko (2016) is preferable to a model which simply uses a binary  $p$  or  $\neg p$  system. Both of these latter points would be good avenues for future research.

## Chapter 6

# Extending the theory: Rhetorical questions

### 6.1 Introduction

In chapter 3 we saw that the particle *-int* in Glasgow Scots and the particle *-n* in Shetland dialect are available to some extent in polar rhetorical questions, but not in rhetorical *wh*-questions. In chapter 4 I presented an analysis of these particles which argued that they were CHECK markers, checking that the addressee shared the speaker's belief of *p*. On the basis of the results and of this analysis, I posited a close relationship between biased questions and polar rhetorical questions, under the umbrella of 'non-canonical questions'. However, rhetorical *wh*-questions are also 'non-canonical questions', in that they do something more than purely seek information. It is therefore worth considering what exactly the relationship between polar rhetorical questions and rhetorical *wh*-questions is, and why Scots CHECK moves are not permitted in rhetorical *wh*-questions.

I will first argue that English polar rhetorical questions can be accounted for in the same way as biased questions in the framework of Domaneschi et al. (2017), with rhetorical questions in effect 'filling in the blanks' in their table of question types (see Table 6.1). This means that they are still questions, albeit with specific pragmatic purpose. This follows from the analysis I presented in chapter 4. I then turn to *wh*-questions. I will firstly explain why *wh*-rhetorical questions cannot express bias in the same way as polar questions. I will then present evidence to argue that we must consider at least two types of rhetorical *wh*-questions: those with polarity flip, and those without. The fact that both can occur is observed by Rohde (2006) and Caponigro and Sprouse (2007) – however, what



the authors do not observe is that there are particular generic interpretations associated with polarity-flipped rhetorical *wh*-questions. I argue that when there is no polarity flip, rhetorical *wh*-questions are true questions with specific pragmatic purpose (Caponigro and Sprouse 2007, Biezma and Rawlins 2017).

On the other hand, polarity-flipped rhetorical *wh*-questions have a particular generic interpretation and cannot refer to (a) specific known individual(s). To my knowledge, this difference in polarity and interpretation has not been observed in the literature. To support this discussion, I present the results of an online experiment that suggests that in generic cases, rhetorical *wh*-questions are propositions as they can be selected by *because* clauses. This is exemplified by variation in acceptability between examples like (355) and (356).

(355) I'm going, because who doesn't want to meet Beyoncé?!

(356) \*I'm going, because don't I want to meet Beyoncé?!

This suggests that generic rhetorical *wh*-questions require a more strongly semantic analysis, separate from the pragmatic analysis given for the non-flipped *wh*-question cases and the polar question cases. In order to account for both types of rhetorical *wh*-question, I extend the semantics for *wh*-questions presented in Kotek (2016).

Of course, there are many more types of rhetorical questions that I do not discuss in this chapter – for example, idiomatic examples like the famous ‘Is the Pope Catholic?’, or the examples of rhetorical alternative questions presented by Biezma and Rawlins (2017). I do not mean this chapter to be a full exploration of rhetorical question types, but rather to argue firstly for a closer relationship between polar rhetorical questions and matrix biased questions and secondly that one singular mechanism cannot be posited to deal with ‘rhetorical questions’ as a broad category.

## 6.2 Motivation

### 6.2.1 Recapping the Scots data

In chapter 3, I presented the results of data collection from two Scots varieties, from Glasgow and from Shetland, establishing the distribution of the particles *-int* and *-n*. One particularly interesting result was that these particles were available for participants in polar rhetorical questions, but not in rhetorical *wh*-questions (see section 3.3.5, in particular Figures 3.52 and 3.54 when compared to Figures 3.60 and 3.62). These distinctions are significant. In Shetland, the overall mean rating for *-n* in polar rhetorical questions was

4.25 while for rhetorical *wh*-questions it was  $3.04 - t(229.37) = 9.858$ ,  $p < .001$ <sup>76</sup>. In Glasgow for the 55+ group, the mean rating for *-int* in polar rhetorical questions was 4.27 while in rhetorical *wh*-questions it was  $2.99 - t(154.33) = -6.669$ ,  $p < .001$ . For the 18-30 group, recall that their judgments on both standard verb-subject-*no* questions and *-int* polar rhetorical questions were lower than the older group: however, their judgments for *-int* in polar rhetorical questions (mean = 3.52) were still significantly higher than in rhetorical *wh*-questions (mean = 2.45):  $t(156.2) = -4.845$ ,  $p < .001$ .

It is therefore not the case that *-int* or *-n* can be seen as general markers of non-canonical question negation: if that were the case, one would expect that *-int* and *-n* would be available in rhetorical *wh*-questions too. Further, if it were the case that *-int* and *-n* were markers of syntactically raised negation (in non-canonical contexts), we might expect there to be a distinction between subject and object rhetorical *wh*-questions – however that is not what the results show. In neither variety was there a significant difference in acceptability for rhetorical *wh*-questions that depended on the type of *wh*-question.

In chapter 4, I argued that despite looking like negation markers, *-n* and *-int* were instances of CHECK markers. Further, although the constructions that they appear in look like questions on the surface, I argued that they were not: instead, these particles have specialised in the left periphery to indicate that the speaker assumes the addressee shares their belief of *p*. This explained their distribution across constructions; I showed that the contexts in which these particles are permitted are contexts where the speaker is able to take full responsibility for the proposition *p*, but also believes that the addressee shares their belief, and thus wants to CHECK that this is true.

However, I also argued that polar rhetorical questions in standard English (and instances of verb-subject-*no* rhetorical questions in Scots) were *not* CHECK moves; instead, I suggested that there should be a closer link between polar rhetorical questions and matrix biased questions. I will explore this in more detail here. Note that this relationship between different types of attitude-expressing questions (such as biased questions and tag questions, as well as rhetorical questions) is observed by Biezma and Rawlins (2017:303), who suggest that they are from the ‘same family’. However, Biezma and Rawlins (2017) posit that this holds for all rhetorical questions; I will argue this is not the case.

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<sup>76</sup>This holds across clearly local instances of *-n* and the potentially confounded cases, where *-n* could be confounded with standard English *-n't*.

## 6.2.2 Polar rhetorical questions: filling in the blanks

Recall the table of interrogative preferences from Domaneschi et al. (2017), presented once again here in Table 6.1.

	speaker belief		
	<b>p</b>	<b>neutral</b>	<b>¬p</b>
evidential bias	<b>p</b>	PPQ / <i>really?! PPQ</i>	<i>really?! PPQ</i>
	<b>neutral</b>	ONPQ	
	<b>¬p</b>	ONPQ	INPQ

Table 6.1: Relationship between epistemic and evidential biases established in Domaneschi et al. (2017) for choice of matrix question produced in English and German.

Recall that ONPQs, or ‘outer negation polar questions’ are matrix biased questions, while INPQs, or ‘inner negation polar questions’, are true negative questions; recall also the different negation positions seen in each construction, as seen in (357) and (358)<sup>77</sup>.

(357) Doesn’t John have to go to the meeting (too)? BIASED QUESTION

(358) Does John not have to go to the meeting (either)? TRUE NEGATIVE QUESTION

The other questions in this table are PPQs, or positive polar questions, and *really?! PPQs*, which are positive polar questions with a preceding *really?!*, as seen in (359) and (360).

(359) Does John have to go to the meeting? POSITIVE POLAR QUESTION

(360) Really?! Does John have to go to the meeting? SURPRISAL POLAR QUESTION

Domaneschi et al. (2017) tested these four constructions in constructed scenarios in which the participant’s existing belief state was set up so as to believe  $p$ , believe  $\neg p$ , or to have no existing belief regarding  $p$  or  $\neg p$  (neutral). The participant was then presented with a context in which the contextual evidence either pointed in favour of  $p$ , in favour of  $\neg p$ , or had no particular impact on whether  $p$  or  $\neg p$  should hold (neutral). The participant was then asked to produce the one of the four questions they would be most likely to produce in the given situation. The results are summarised in the table above.

<sup>77</sup>I follow the results of Domaneschi et al. (2017) and Sailor (2013) in setting aside Ladd’s (1981) reported ambiguity, where high *-n’t* negation can also have true negative question meaning. However, note again that Domaneschi et al. (2017) find that there is variation in the intonation used in biased questions in the case where the speaker has a belief of  $p$  but the evidential context suggests that  $\neg p$  is true, and suggest that this may correlate with some sort of true negative meaning. They leave the details for future research; as do I.

For this section, the most relevant cells are those which are filled with grey. Domaneschi et al. (2017) did not test any questions in these contexts as they argued that questions would not be produced in those contexts. The most interesting cells for our purposes are the top left cell ( $p/p$ ) and the bottom right cell ( $\neg p/\neg p$ )<sup>78</sup>. The authors argue that ‘a speaker with an original bias for  $p$  that receives contextual evidence for  $p$  will most naturally assume that  $p$  is true and will not feel prompted to inquire about the truth of  $p$ ’ (Domaneschi et al. 2017:8). The same reasoning applies to the bottom right cell: a speaker with a belief of  $\neg p$ , presented with evidence for  $\neg p$ , will assume that  $\neg p$  is true and will not feel prompted to inquire about status of  $\neg p$ . These claims are supported by evidence from Roelofsen et al. (2012), whose experimental work suggests that participants negatively evaluate interrogatives in these contexts.

Domaneschi et al.’s (2017) reasoning for excluding the two corners of the grid is sensible: in general, if a speaker has a belief and it is supported by the evidential context, there is no reason for them to question it. However, these are of course the exact contexts in which polar rhetorical questions are used: instances in which the speaker assumes that their ‘attitude [towards the answer of the question] is (or should be) accepted by all participants’ (Biezma and Rawlins 2017:303)<sup>79</sup>. The proposition which is the answer to the question is already in the shared ground between participants, whether through previous discussion or through the evidential context to the interaction.

I argue that these questions can be analysed in the same way as biased questions. Both sets of constructions require that the speaker presents both  $\{p, \neg p\}$  and some common ground management content as part of the question for a situation in which the speaker believes  $p$ . In having a FALSUM or VERUM operator as part of the question, the speaker is asking whether or not the addressee agrees that the answer to the question should be added to the Common Ground, just as in a biased question (for more details, see section 4.3) (Romero 2015). Unlike a biased question, however, the intonation on a polar rhetorical question does not rise as frequently (Dehé 2017); I take it that this falling intonation signals a lack of *contingency* as defined by Gunlogson (2008) and discussed in depth in section 4.3.

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<sup>78</sup>Domaneschi et al. (2017) exclude the middle right cell as they predict it licenses a complex question form using both high and low negation, such as (i).

i) A: I’d like to send this paper to a senior reviewer, but I’d prefer somebody new.  
 B: Hasn’t Frege **not** reviewed for us yet? (Romero and Han 2004:28)

They decide to set aside complex interrogatives like this for future study.

<sup>79</sup>The evidential context need not be  $p$  for a rhetorical question, but it should be at least [–negative], e.g. neutral or in support of  $p$ . I take this as further evidence for overlapping between biased questions and polar rhetorical questions.

This accounts for the fact that regular questions with bias and polar rhetorical questions share the same forms – for example, high negation (taken to be *FALSUM* in the literature) or particular focus/*really* in positive forms, both argued to be *VERUM* markers in the literature. The only things that differ are firstly, their intonation, and secondly the pragmatic context in which they are used.

It is of course possible that languages may specialise forms to use for the particular pragmatic function of a rhetorical questions (Gaertner and Gyuris 2017); however, that does not appear to have happened in English.

### 6.2.3 Rhetorical *wh*-questions

Above, I argued that polar rhetorical questions should be considered in the same framework as matrix biased questions, expressing that the speaker strongly believes either  $p$ , or believes  $\neg p$ . This effectively has the same import as a matrix biased question; however, the contextual factors are different, with no challenging evidence against the proposition and the condition that  $p$  is already assumed to be known to both conversation participants. While in English I argue that this role isn't syntactically or semantically specialised, I believe that it has been in the Scots data I presented in chapter 3.

One of the key points that motivated this extension of the analysis of polar rhetorical questions given by e.g. Biezma and Rawlins (2017) was the evidence from the Scots data, summarised above. While *-int* and *-n*, analysed as *CHECK* moves, can be used in polar rhetorical questions, they are not acceptable in rhetorical *wh*-questions. Above, I argued that polar rhetorical questions express the bias that the speaker believes  $p$ ;  $p$  is assumed to be in the shared ground, or *FACTS*, and pragmatically there is no evidence challenging this belief of  $p$ . I argued that in standard English, this was expressed by means of biased questions with *FALSUM* or *VERUM*, depending on the polarity of the proposition to be expressed; the optionality of response was once again presented through *contingency* (Gunlogson 2008), based on the fact that polar rhetorical questions have considerably less rising intonation than information-seeking questions (Dehé 2017)<sup>80</sup>. I argued that the Scots *CHECK* particles developed from these type of questions. The question is therefore why *wh*-questions do not express these same biases, despite seemingly having the same rhetorical type properties as polar rhetorical questions – for example, they do not expect an answer though can optionally be answered; the answer is obvious to both the speaker and the addressee; they 'feel' somewhat like an

assertion (Rohde 2006, Caponigro and Sprouse 2007, Biezma and Rawlins 2017).

I argue that this is quite simply to do with the semantics of *wh*-words. The pragmatic work required to answer a question based on information in the Common Ground in a polar question is very different to a *wh*-question; I argue this means that although their interpretations are both dependent on speaker and addressee shared beliefs, these conclusions are reached in different ways. This accounts for two important points: firstly, the development of the distinction seen in the Scots data, and secondly, evidence from polarity flip, discussed below. I will then argue that this evidence from polarity flip suggests that there are two types of rhetorical *wh*-questions: those in which specific values are pragmatically filled into the *wh*-variables, and those in which there is a generic, polarity flipped implication. I will argue that this latter type of question requires a more formalised semantic meaning.

### **The semantics of *wh*-words**

The semantics of *wh*-words makes it very clear why rhetorical *wh*-questions do not express bias in the same way as polar questions. There are various definitions of *wh*-words in the literature. Ginzburg and Sag (2001) define *wh*-words as variables; for Hintikka (1962) or Karttunen (1977) *wh*-words are quantified expressions, while Hamblin (1973) defines a *wh*-word as a set of all the possible answers. I will settle for the Hamblin definition in this section of the thesis, as it is the most common.

If we consider the semantics of polar rhetorical questions posited above, a polar rhetorical question without negation is a question with VERUM, or FOR-SURE-IN-CG(*p*); a polar rhetorical question with negation is a question with FALSUM, or FOR-SURE-NOT-IN-CG(*p*). These not-at-issue operators scope over the proposition (and can be scoped over by the question operator). However, with a *wh*-word, there is an unknown in the proposition. It is therefore impossible to express VERUM or FALSUM in the same way with a *wh*-question – there is no full proposition that can be FOR-SURE-IN-CG or FOR-SURE-NOT-IN-CG. While it may be possible for a speaker to indicate some sort of inclination towards a proposition that they do not have the full details of, with regards to a rhetorical question the speaker is required to express some sort of attitude towards each part of the underlying proposition: semantically, while it would be possible for them to claim that they were certain that part of the proposition should be in the Common Ground, if one

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<sup>80</sup>Note that Dehé (2017) discusses information-seeking questions, *not* biased questions. While I have argued that these are information-seeking, though biased, it would be worth carrying out separate experimental investigation into the prosodic patterns of matrix biased questions.

part of the construction is in fact a set of all possible answers, it is not possible for a speaker to claim that this whole set should be in the Common Ground. The speaker can not express an attitude about this part of the proposition, and thus a VERUM or FALSUM operator cannot scope over a *wh*-word.

Therefore, *wh*-questions cannot express bias in the same way that polar rhetorical questions do, despite sharing their pragmatic contexts – of having an answer that is either already in the Common Ground for all conversation participants or is obvious to all conversation participants through the evidential context.

This accounts for the Scots data seen in chapter 3; if negation in biased questions and polar rhetorical questions is expressed through FALSUM questions, and this is what the Scots CHECK marker developed from, FALSUM would not have been in the rhetorical *wh*-questions to begin with. Once it had been reanalysed as a CHECK marker, its purpose could not be extended to rhetorical *wh*-questions because, again, a *wh*-variable cannot be subject to a CHECK move as there is not a full proposition there to be CHECKED.

I believe this also provides support for the syntactic analysis presented in section 4.4 – the CHECK marker has been reanalysed in the left periphery, and is thus higher than the negation we see in *wh*-questions.

I now turn to consider an alternative analysis for rhetorical *wh*-questions, firstly summarising key points from the literature on the potential for polarity flip (section 6.2.4), as well as the answer possibilities for rhetorical questions (section 6.2.5).

#### 6.2.4 Polarity flip

Traditional accounts of rhetorical questions in the literature make the claim that despite being superficially interrogatives, rhetorical questions are equivalent to assertions of the opposite polarity (Sadock 1971, 1974, Krifka 1995, Han 2002, van Rooij 2003). In effect, then, positive rhetorical questions are equivalent to negative assertions; rhetorical questions with negation are equivalent to positive assertions. This was taken to hold for both polar rhetorical questions and rhetorical *wh*-questions.

(361) Did I tell you that writing a dissertation was easy?! (= ‘I didn’t tell you that writing a dissertation was easy.’)

(362) Didn’t I tell you that writing a dissertation was easy?! (= ‘I told you that writing a dissertation was easy.’)

(363) What has John ever done for Sam?! (= ‘John has done nothing for Sam.’)

(364) What hasn't John done for Sam?! (=‘John has done everything for Sam.’)

(examples from Han 2002:202)

This idea of ‘polarity flip’ was integral to early analyses of rhetorical questions, but more recent work identifies that there is a broader range of rhetorical questions than first considered (Rohde 2006, Caponigro and Sprouse 2007, Biezma and Rawlins 2017). For example, Biezma and Rawlins (2017) note that alternative questions can be rhetorical (365).

(365) Are you doing a PhD or vacationing in Konstanz?! (Biezma and Rawlins 2017:303)

More relevant for the current discussion is the observation by Rohde (2006) and Caponigro and Sprouse (2007) that rhetorical questions, as well as having interpretations of ‘assertions of the opposite polarity’, can also denote specific propositions. For example, in (366), the answer to the rhetorical question is the individual ‘your mother’ rather than ‘no one’; similarly in (367) it is not the case that ‘everyone’ helped Luca when he was in trouble; rather, it is the specific individual ‘Mina’ who helped him.

(366) Who fed you and gave you a proper education?

(= ‘Your mother fed you and gave you a proper education’)

(Han 1998:9)

(367) It's understandable that Luca adores Mina. After all, who helped him when he was in trouble?

(=‘Mina helped Luca when he was in trouble’)

(Caponigro and Sprouse 2007:124)

The first point to note is that these non-null set interpretations of rhetorical questions do not exhibit the same sort of polarity flip as the examples in (361-364): the rhetorical question in (367) does not imply that Mina did not help Luca, for example. The second point is that both of the examples presented here without polarity flip are rhetorical *wh*-questions. Is it the case that only *wh*-questions can have rhetorical interpretations without polarity flip?

Rohde (2006) does give a single example of a polar rhetorical question without polarity flip: the classic example *Is the Pope Catholic?*. This example is clearly idiomatic and should not, to my mind, be considered as part of a productive paradigm of rhetorical question strategies. Biezma and Rawlins (2017:312) consider a couple of other potential examples:



(368) *John thinks that it would be fun to pour water over Tim's head; he goes ahead and does it.*

Tim: Are you an idiot?!

(369) *John is about to jump from the top of a tree.*

Tim: Is that guy crazy?!

These questions are only licensed in situations where the speaker has made an assumption about  $p$  e.g. that John is acting like an idiot. However, if John is a stuntman training for his next film by jumping from trees, Tim's utterance is no longer licit (Biezma and Rawlins 2017). Therefore, it may seem at first as though the rhetorical question is implying that 'that guy is crazy'. However, relevantly for us here, it is difficult to tease apart exactly what the implied meaning of the question is. On one hand, clearly the question is licensed by some evidence which indicates that  $p$  is true (e.g. 'that guy is crazy') and so one might expect that the implied answer is 'yes'. On the other, if the speaker did not believe that  $\neg p$  was true (e.g. 'that guy is not crazy'), they would not be posing any question. The expectation is presumably, therefore, that the 'answer' is *no*, he's not crazy, and that this is known to all conversation participants, but some additional explanation is required for his current behaviour. It does not, therefore, seem to correct to consider these as polar questions which have answers without polarity flip.

There are also 'monologue' rhetorical questions, mentioned by Biezma and Rawlins (2017:303) in a footnote.

(370) Presenter: So we have seen all the machinery we have at our disposal. Can we find an answer to our initial problem? Well, let's see...

Examples like these also do not require polarity flip; however, they appear more like self-addressed questions. Certainly, monologue is not an ideal context to work out the interactional properties of rhetorical questions; I will thus set examples like these aside.

So, for the most part, rhetorical polar questions seem to require polarity flip, and the cases that don't require it are the exceptions, rather than the rule. This is also the conclusion that Caponigro and Sprouse (2007) reach. The same cannot be said of rhetorical *wh*-questions, where polarity flipped answers and specific proposition answers are both common. Although seemingly a key point, this has not been accounted for in research on rhetorical questions to date.

Indeed, existing accounts of rhetorical questions in the literature have given a uniform analysis for all types of rhetorical questions, regardless of whether that analysis

is semantic (Han 2002) or pragmatic (Rohde 2006, Caponigro and Sprouse 2007, Biezma and Rawlins 2017). I will overview the more recent pragmatic accounts, highlighting data that these accounts do not discuss as well as their merits.

Rohde (2006) argues for an account of rhetorical questions which is based around *entropy*, following van Rooij (2003). She thus follows Shannon's (1948) formula for the uncertainty of a system in order to calculate how 'surprised' a conversation participant will be to discover the value of an undefined variable. For example, in the instance of a regular, information-seeking *wh*-question like *Who went to the party?*, the entropy levels for the speaker posing the question will be high, as from the set of possible attendees, there is an equal probability of any of the possibilities being the correct answer. For example, with a question 'Who went to the party?' in a set of three people, Josie, Leon and Monika, the possibility that Josie attended is as high as the possibility that Leon attended, or that Josie and Leon attended, etc. for all eight possibilities – therefore, whatever the answer is, the speaker will be to some extent surprised by the answer.

On the other hand, in a rhetorical question, Rohde (2006) argues that the entropy is reduced because the probability of selecting one particular cell of the possibilities is higher. The probability is skewed and the answer is predictable because the answer is known to both the speaker and the addressee. For example, if the speaker and the addressee both know that Leon is the only one of Josie, Leon and Monika who ever attends parties, the rhetorical question 'Who went to the party?' will have lower entropy, with a higher probability that Leon is the correct answer based on the fact that the speaker and addressee share this belief about Leon's proclivity for partying.

In order to account for the fact that the speaker and the addressee do not have one shared set of beliefs or one shared Common Ground, Rohde (2006) posits a condition of 'sufficient similarity', by which conversation participants' beliefs are compared on a relevant scale. Scales can be introduced by a number of different things, and do not even have to mean identity between the participants' answers, but could relate to general similarity. The scale can be introduced by a negative polarity item e.g. *lift a finger*, which will then 'highlight the bottom element' (Rohde 2006:155); scales are similarly introduced by quantity *wh*-words, e.g. *how many* or *how soon*. Rohde then uses the idea of an explicit scale to analyse rhetorical questions with no negative polarity items, which she argues invoke scales based on the probability values associated with each possible answer, introduced by the lexical items in the question.

(371) Who would steal a newspaper?!

Rohde (2006:157)

In (371), she argues that each conversation participant has an ordered set of worlds based on the likelihood that any individual would steal a newspaper; the probability distribution is skewed towards one end, with high probability that no one would steal a newspaper, followed by the high likelihood that ‘a lunatic’ would. At the other end of the scale are individuals with extremely low probability of stealing a newspaper and who are therefore unlikely to be selected from the sets encoded in *who*. It doesn’t matter exactly what is at the end of each participant’s scale, as long as the participants’ respective answers are equally extreme on the scale. In this way, Rohde (2006) attempts to account for the possibility of the answer being ‘no one’ as well as a possible exact reference (with high probability).

While the idea of having scalar probabilities for answers is appealing, this account is unable to deal with the aforementioned polarity flip (or lack thereof): why do rhetorical *wh*-questions without negation imply the negative, and why do the same constructions with negation imply the positive? Rohde (2006) does not discuss this. Secondly, I believe there that the null set interpretations have an element of *generic* meaning that is not captured by this analysis. For example, regarding (371), the idea that *no one* would steal a newspaper is not logically true; however, if the speaker and addressee both know that Oli is a thief, there is no generic aspect. The rhetorical question does not imply that someone like Oli would steal a newspaper, it implies that Oli specifically would steal a newspaper. It is not the case that the speaker means none of the set would steal a newspaper, but rather that for some approximation of ‘everyone’, it is the case that they would not steal a newspaper.

While Rohde (2006) improves on the earlier literature in taking into account multiple types of rhetorical questions, she cannot capture the differences in accounting for polarity flipped rhetorical *wh*-questions and non-flipped ones.

Caponigro and Sprouse (2007) take a very similar position to Rohde (2006), arguing that rhetorical questions are simply questions which pragmatically do not have to be answered because the answer is known to all conversation participants, and all conversation participants know that this is the case. The authors do not invoke entropy in order to deal with the probabilities of possible answers but simply argue that the interpretations of rhetorical questions arise due to the mutual beliefs of the conversation participants which are public and shared. The analysis provided in Rohde (2006) is more complex and deals explicitly with a wider variety of rhetorical question data; however, Caponigro and Sprouse (2007) also present some interesting data on rhetorical questions

which I will summarise here; some of which will be particularly relevant to the discussion in section 6.4.1 regarding multiple *wh*-questions.

Firstly, Caponigro and Sprouse (2007), like Rohde (2006), acknowledge that rhetorical questions can have both negative and positive answers, or implications. However, they do not acknowledge the generic nature that the polarity flipped answers bring.

(372) All faculty members voted for the current chair months ago, and now everyone is complaining about him to the students.

S: They should stop complaining about the chair to us. After all, who voted for him?

A: (All of) them / #Nobody. (Caponigro and Sprouse 2007:4)

This example would, at first, seem to go against the generalisation that I have made above, in which only polarity flipped quantifier answers are permitted. However, note that in this example, the speaker and addressee are both aware that *all* of the faculty voted for the current chair i.e. it is an instance of a specific reading which happens to be plural. This is therefore an instance where it truly is an example of the specific cell in which the specific cell is also all of the relevant members of the set, rather than an instance where there is a quantifier indicating some element of ‘genericness’.

Secondly, as Caponigro and Sprouse (2007) state, if rhetorical questions are simply questions, one would expect that it would be possible to have multiple *wh*-word questions with rhetorical readings. The authors claim that only single-pair readings are available for multiple *wh*-questions with rhetorical readings. Single-pair readings are those in which there is a specific pair of answers that are the true and informative answer to the question; on the other hand pair-list readings are those where for every member of the set of one of the *wh*-words, there is an answer from the set of the other *wh*-word (single-pair vs. pair-list readings will be discussed more in section 6.4.1). Caponigro and Sprouse (2007) then present the results of a pilot judgment study in which they show that participants do accept rhetorical questions with multiple *wh*-words provided there is an acceptable context and an ordering word (like *first*) to trigger the single-pair readings such as (373).

(373) *Murray danced with Brent’s girlfriend at the dance while Brent got some punch.*

*So, while Murray went to the bathroom, Brent danced with Murray’s girlfriend. As Murray got angry, Brent said:*

You can’t be angry; after all, who danced with who first?!

Caponigro and Sprouse (2007) show that their participants accept rhetorical readings for examples like (373). However, note that it does not seem to be possible to have a case in which one *wh*-element indicates a specific cell (e.g. ‘Murray’, ‘Brent’s girlfriend’) and another indicates the generic null set<sup>81</sup>.

I take this as further evidence that the ‘negative answers’ that can be offered for rhetorical *wh*-questions are not the same as the possible null set answer to true *wh*-questions, in the way that the analyses of both Rohde (2006) and Caponigro and Sprouse (2007) predict. If they were, we would expect that it would be possible to have multiple *wh*-questions in which one or both of the *wh*-elements were interpreted as elements of the full or empty set.

Further evidence that may build on this point is the lack of availability of the polarity flipped or ‘generic’ interpretation in rhetorical *wh*-in-situ questions. These echo questions can again, only refer to specific variables and not to a generic value.

(374) *A believes they have been nothing but nice to B.*

S: B told me you were rude to him.

A: He said what?!

(375) *M is known for being very unfashionable.*

S: M bought that shirt you really wanted.

A: Who bought it?!

The final part of Caponigro and Sprouse (2007) that it is worth discussing are the two examples that they consider ‘problematic’; it is, they argue, easier to get the reading in (377) than it is to get the truth-conditionally equivalent reading in (376).

(376) After all, who likes ice cream?

#Everybody.

(377) After all, who doesn’t like ice cream?

Nobody. (= Everybody likes ice cream.)

Their claim is probably true. However, I believe that they are simply asking the wrong question: although the readings are truth-conditionally equivalent, the generic rhetorical question in (376) would trigger a negative answer, implying that ‘There is no

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<sup>81</sup>It is possible that there could be a single-pair answer where one of the *wh*-words equated to a plural group that is the null set. However, that is not the same interpretation as ‘generic’ ‘nobody’.

one who likes ice cream’ – just like the example Caponigro and Sprouse (2007) give involving castor oil, shown here in (378).

(378) After all, who likes castor oil?

Nobody.

It is possible to get a felicitous interpretation of (376) if the interpretation is specific – i.e. if the *wh*-variable is filled with the partition of the set that includes all the members of the set). In order to get this reading, both conversation participants would need to be sure that every member of the set did indeed like ice cream. Of course, this cannot be said to be for everyone in the world; however, it might be able to be said for e.g. all the attendees of a child’s birthday party (379).

(379) A is organising a birthday party for S’s child and their friends. A is baking a cake, but the cake isn’t ready, and A is worried that there won’t be enough food. There is already ice cream, and both A and S know that the children all like ice cream.

S: Don’t worry! After all, who likes ice cream?

S or A: Everyone. / All the children.

In the castor oil example (378), on the other hand, it is the case that there probably are people who like castor oil, but for the majority, the speaker (and addressee) believe it is safe to assume that they don’t.

Caponigro and Sprouse (2007), therefore, discuss a number of interesting examples that support the idea that something else is going on with null/full set rhetorical *wh*-questions. In particular, I will return to the multiple *wh*-questions in section 6.4.1.

The most recent relevant account of rhetorical questions in the literature comes from Biezma and Rawlins (2017), who update the semantics of Caponigro and Sprouse (2007) to a dynamic Stalnakerian semantics based on Farkas and Bruce (2010), in which rhetorical interpretations of questions arise due to their being ‘non-inquisitive’ on the QUD stack. The answer to the question is incorporated as a presupposition, which is automatically updated into the context set (if not already there) before the construction reaches the QUD; the rhetorical question is thus non-inquisitive as the update has already been forced to the context set. In order to reject the presupposition of a rhetorical question, Biezma and Rawlins (2017:318) suggest that ‘rhetorical disagreements are often marked as targeting not-at-issue content, e.g. by *actually*’, lending support to their argument that the answer is incorporate by presupposition. The overall effect is therefore similar to an assertion (a proposal to update the common ground, which is then accepted); however, the effect of

the rhetorical question is that it is a non-inquisitive question which can then simply be accepted because the answer has already been forced by presupposition.

This analysis is acceptable for the rhetorical *wh*-questions in which there are specific answers shared in the common ground by participants; however, it also does not account for the issues of polarity flip or genericness that I discussed above.

Here, I have shown that there is reason to treat cases of rhetorical *wh*-questions which imply answers that are assertions of the opposite polarity as separate from cases of rhetorical *wh*-questions in which a specific partition of the set is known to be the true and informative answer to the question. I will firstly rule out the possibility of investigating this through answering possibilities, before I present the results of an experiment aimed at further testing the properties of the ‘generic’ opposite polarity cases, showing that speakers accept these as the complements of *because* clauses, indicating that they are interpreted as propositions. I will then give an analysis for these constructions in section 6.4.

### 6.2.5 Answering possibilities

As highlighted above, the literature argues that all rhetorical questions should be able to be accounted for by one analysis. However, the data presented above suggests that *wh*-questions with answers of the opposite polarity are different to those which imply that there is a specific known value in the common ground that fills the *wh*-variable. Firstly, the first type of question always implies an answer which is of the opposite polarity to the question; secondly, there is an element of genericness to their interpretation, rather than the true empty or full set interpretation; finally, while multiple *wh*-questions can have rhetorical readings, they can only have specific single-pair interpretations – the opposite polarity/generic examples readings are infelicitous in those contexts. Rather than having a purely pragmatic interpretation, then, in which the *wh*-variable is filled by shared knowledge in the common ground, I suggest that the meaning of these polarity flipped rhetorical questions may be derived in the semantics, leading to these *wh*-questions behaving more like assertions. How can we test this?

One of the key distinctions between rhetorical questions and assertions posited by Biezma and Rawlins (2017) is the fact that rhetorical questions can be responded to with ‘That’s right.’ but not ‘That’s true.’, implying that these are not propositions and do not have truth values.

(380) S: Are you doing your PhD or vacationing in Konstanz?!

A: You’re right / #That’s not true!

(381) S: Are you an idiot?!

A: You're right, I shouldn't have done that. / #That's true, I shouldn't have done that.

Biezma and Rawlins (2017:304)

Using possible answers would therefore be an obvious way to test whether the 'generic' rhetorical *wh*-questions are semantically not questions. However, as with some of the answering properties discussed in section 4.3, it appears that the required preconditions for the different answering moves varies more than has been discussed in the literature. If we look first at the 'generic' rhetorical questions, it seems that 'that's true' can be an acceptable response.

(382) *A is fretting about the fact that they have over-catered for a party and are going to be left with too much food at the end.*

S: Oh, don't worry about the fact you bought too much ice cream. It will get eaten. Who doesn't love ice cream?!

A: That's true.

However, with marginally altered contexts in which A has not previously committed to  $\neg p$  in some way, those responses are no longer acceptable.

(383) S: I found out yesterday that your girlfriend doesn't like ice cream. What?! Who doesn't like ice cream?!

A: I know! / #That's true.

It may be the case that 'that's true' is only acceptable when the addressee needs to accept the truth of the proposition in a case where they have not done so previously, rather than generally being available as a marker of agreement. Looking at rhetorical *wh*-questions with specific values as well as polar rhetorical questions, it becomes apparent that this is a more general phenomenon. In cases where the addressee has hinted at a  $\neg p$  commitment, 'that's true' is acceptable (384-385); where they haven't (386-387) it is not.

(384) *A is telling S that they are worried they are going to be late to Y's birthday.*

S: Don't worry about being late to Y's birthday party. Who was late to your birthday party?

A: That's true.

(385) *S and A are waiting for Y at her birthday party; she is nowhere to be seen.*



S: Ugh, Y is late again. It's always her. Who was late to my birthday party? Who was late to your birthday party?

A: I know / #That's true.

(386) *S is helping A look for a flat; they have looked at all the flats available on the south side, as that is where A's work is. S thinks they've found a great opportunity in the west end, but A looks dubious.*

S: You're not going to find anywhere closer to work than this. Didn't you already look at all the flats on the south side?!

A: That's true. / # I know.

(387) *S and A are looking for a flat for A. They have already looked at all the available flats in the south side, because that is where A wants to live. S assumes A has made a decision, but A asks them to go to a viewing on Saturday.*

S: Ugh, but flat hunting is so boring. Didn't you already look at all the flats on the south side?!

A: I know (but I want to double check). / #That's true.

Just as we saw regarding the potential responses to 'check' moves in section 4.3, then, answering moves in themselves appear to have specific preconditions and effects regarding conversation participants' existing beliefs and the commitments they wish to make. Looking at the responses in themselves can't, therefore, make a distinction between 'assertions' and 'questions'.

Instead, I test the acceptability of these generic type rhetorical *wh*-questions as the complements of *because* clauses. *Because* clauses only take complements denoting propositions (Johnston 1994), and if rhetorical *wh*-questions were behaving as propositions, it would suggest that they would be acceptable in this context<sup>82</sup>. I compare this with the acceptability of polar rhetorical questions as well as declaratives in the same context, and show that these generic rhetorical *wh*-questions are rated as 'OK/fine' by participants – better than polar rhetorical questions though not as acceptable as declaratives. These results add further support to the analysis I will put forward for *wh*-questions with the generic rhetorical interpretation in section 6.4.1.

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<sup>82</sup>Thank you to Rebecca Woods (p.c.) for providing the original data from *because* clauses, and for further discussion on this point.

### 6.3 Experiment

In order to test the prediction made by the Scots data as to the lack of similarity between polar and *wh*- rhetorical questions, as well as the behaviour of ‘generic’ rhetorical *wh*-questions, I ran an experiment for non-Scottish native English speakers using Qualtrics. I tested the acceptability of polar rhetorical questions and ‘generic’ rhetorical *wh*-questions as the complement of a *because* clause. Participants were presented with a short context that established a scenario, and a point of discussion between the participant and some other (imagined) addressee. At the end of the context, there were the words ‘you say’. Participants were then presented with an example in bold, which consisted of a matrix clause with a reason clause introduced by *because*.

(388) I am passing around some fermented fish I bought in Iceland. I offer it to you and you say:

I’m not having any, because who wants to eat rotten fish?!

I’m not having any, because do I want to eat rotten fish?!

I’m not having any, because I don’t want to eat rotten fish.

For each context, the matrix clause was kept consistent, and the contents of the subordinate *because* clause varied. In an example like (388), participants would only have seen one of the three potential reason clauses at a time; however, over the course of the experiment, they judged all three examples. For each context, there were either one or two polar rhetorical questions, a ‘generic’ rhetorical *wh*-question, and two declarative fillers, which participants judged in random order throughout the session. Participants judged examples both with and without negation markers. In *wh*-RQs, participants judged both subject questions (with *who*) and object questions (with *what*). Polar rhetorical questions were primarily with pronominal subjects; a separate group with quantifier phrase (QP) subjects were also included. See Table 6.2 for distribution. All stimuli can be seen in Appendix C.

	whRQ		polar RQ	
	subject	object	pronominal	QP
without negation	2	2	4	2
with negation	2	2	4	2
	8		8	4
+ 16 declarative fillers				

Table 6.2: Distribution of forms in the *because* clause experiment.

Participants were asked to rate the acceptability of the bolded sentence on a scale

In this section, you will be presented with a short context. Please read this context. At the end of the context, there will be a statement presented in **bold**.

Please rate this statement by **clicking on the scale** that follows. A rating of **1** indicates that a statement is **terrible**. A rating of **5** indicates that it is **good**.

Don't worry about politeness – just focus on whether the statement feels like it would be an acceptable thing to say in your variety of English.



We have been offered two meet and greet tickets for a Beyoncé concert. We both really like her, but it's at a time when we're both really busy. You say:

**I'm going anyway, because don't I want to meet Beyoncé?!**

Terrible 1          Poor 2          OK 3          Fine 4          Good 5



We have been offered two meet and greet tickets for a Beyoncé concert. We both really like her, but it's at a time when we're both really busy. You say:

**I'm going anyway, because who doesn't want to meet Beyoncé?!**

Terrible 1          Poor 2          OK 3          Fine 4          Good 5



We have been offered two meet and greet tickets for a Beyoncé concert. We both really like her, but it's at a time when we're both really busy. You say:

**I'm going anyway, because I really want to meet her.**

Terrible 1          Poor 2          OK 3          Fine 4          Good 5



Figure 6.1: Examples of the screens that participants were presented with, including the first introduction screen, and the scales on which the participants were asked to judge the examples.

from 1 to 5. The points on the scale were explicitly labelled: 1 = ‘terrible’; 2 = ‘poor’; 3 = ‘OK’; 4 = ‘fine’; 5 = ‘good’, to ensure that participants had a reasonably consistent method of scoring throughout. The scale was presented directly beneath the example sentence, below the context, so participants could flick back to the context and the example when deciding their rating in order to ensure consistency as far as possible. Participants were explicitly told not to worry about politeness when judging a particular example, but of course it is not possible to tell what any individual participant’s judging process entailed.

My hypothesis predicts that the ‘generic’ rhetorical *wh*-questions should be acceptable in these contexts, while polar rhetorical questions, which are true questions, should not be acceptable.

### 6.3.1 Participants

Participants were gathered through Facebook, Twitter and a postgraduate mailing list at the University of Edinburgh. It was stipulated that participants must be over 18, and must be non-Scottish native English speakers. Scots varieties do not exhibit the same *-n’t/not* distinction as other English varieties (Brown and Millar 1980, Thoms et al. 2013) and so were excluded from the data collection. Altogether, 147 completed data sets were collected; one was removed as the participant gave a Scottish location when asked where they grew up, giving 146 participants overall, with a mean age of 30.

Unlike the experiment presented in chapter 5, the literature does not suggest that any particular social group should behave differently from another with regard to rhetorical question production, and so I do not include any intra-participant information in the following model – simply random effects for participant, as well as example.

### 6.3.2 Results

The raw data was downloaded from Qualtrics and stored in .csv format. I first present descriptive statistics; following the descriptive analysis, as in chapter 4, I used the ordinal package (Christensen 2018) in RStudio (RStudio Team 2015) to fit a cumulative link mixed model. Cumulative link mixed models are a type of logistic regression specifically designed for ordered data with more than two response categories without the risks associated with using linear mixed – such as the Likert scale judgments that participants gave to the examples presented in this experiment. As such, it is an appropriate method of analysis for the data gathered in this experiment.

Recall that the scale participants were presented with labelled each point: 1 =

	<b>1</b>		<b>2</b>		<b>3</b>		<b>4</b>		<b>5</b>	
whRQ	62	(5.3%)	223	(19.1%)	253	(21.7%)	354	(30.3%)	276	(23.6%)
ynRQ	302	(25.9%)	471	(40.3%)	222	(19.0%)	131	(11.2%)	42	(3.6%)
declaratives	35	(1.5%)	140	(6.0%)	234	(10.0%)	554	(23.7%)	1373	(58.8%)

Table 6.3: Raw scores for generic rhetorical *wh*-questions, polar rhetorical questions and declaratives as complements of *because* clauses, in which 1 is ‘terrible’ and 5 is ‘good’.

‘terrible’; 2 = ‘poor’; 3 = ‘OK’; 4 = ‘fine’; 5 = ‘good’. Rhetorical *wh*-questions achieved a mean rating of 3.48, with a median rating of 4 and a standard deviation of 1.19. A clear majority (75.6% (N=883)) of the generic rhetorical *wh*-questions were rated in the 3-5 range (OK-Good), with 23.6% (N=276) of those achieving ratings of 5. On the other hand, rhetorical polar questions achieved a mean rating of 2.26, with a median rating of 2 and a standard deviation of 1.07. 33.8% (N=395) of polar rhetorical question examples were in the 3-5 range, with only 3.6% (N=42) achieving ratings of 5.

Declarative fillers were included to provide a comparison point. These fillers received a mean rating of 4.32, with a median rating of 5 and a standard deviation of 0.98. Almost all (92.5% (N=2161)) of the declarative fillers were scored in the 3-5 range, with 58.7% (N=1373) achieving ratings of 5. It thus seems as though, like declaratives, ‘generic’ rhetorical *wh*-questions are acceptable, while polar rhetorical questions are not. This can be seen in Figure 6.2.

The statistical model supports the descriptive results. Fitting a cumulative link mixed model with a fixed effect of construction type and random effects for participant and example shows main effects of construction type: whether *wh*- or polar. Paired t-tests (Bonferroni correction applied, significance level = .025) confirm that declaratives were rated significantly higher than rhetorical *wh*-questions ( $t(1973.4) = 20.914, p < .001$ ), but that rhetorical *wh*-questions were rated significantly higher than polar rhetorical questions ( $t(1167) = 29.378, p < .001$ ).

It seems as though this is another case, then, where there is difference between polar rhetorical questions and *wh*-rhetorical questions; more importantly, however, it also indicates that ‘generic’ rhetorical *wh*-questions do behave more like assertions than questions<sup>83</sup>. I will move on to present an analysis for this in the next section.

<sup>83</sup>It does not seem that specific rhetorical *wh*-questions are available as the complement to a *because* clause.

i) # You should be nice to your mother because who raised you?

These examples are somewhat improved by a) inclusion of *after all* before the *wh*-question, or b) rising intonation on the question, which the speaker themselves then answers. I set aside both of these issues.



Figure 6.2: Proportions of judgments for generic rhetorical *wh*-questions, polar rhetorical questions and declaratives as the complements to *because* clauses.

```

Random effects:
Groups Name      Variance Std.Dev.
id      (Intercept) 1.4411  1.2005
example (Intercept) 0.4394  0.6629
Number of groups: id 146, example 32

Coefficients:
      Estimate Std. Error z value Pr(>|z|)
typewh  -1.9170    0.2966  -6.463 1.03e-10 ***
typeyn  -4.2619    0.3019 -14.118 < 2e-16 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Threshold coefficients:
      Estimate Std. Error z value
1|2  -5.5392    0.2177 -25.446
2|3  -3.4248    0.2065 -16.582
3|4  -2.1424    0.2022 -10.597
4|5  -0.4444    0.1990  -2.233

```

Figure 6.3: Cumulative link mixed model for rhetorical questions as complements of *because* clauses, with fixed effects of clause type and random effects for participant and example. There is significant effect of clause type.

## 6.4 Towards an analysis for ‘generic’ rhetorical *wh*-questions

Above, I set out arguments from the literature that there should be one analysis for all types of rhetorical questions (Sadock 1974, Han 2002, Rohde 2006, Caponigro and Sprouse 2007, Biezma and Rawlins 2017). However, based on the data from Scots seen in the earlier chapters of this thesis as well as evidence from polarity flip. I argued that although polar rhetorical questions and rhetorical *wh*-questions were used in the same pragmatic contexts (i.e. contexts where the speaker and addressee are assumed to agree on the same answer, which may be in the Common Ground already), polar rhetorical questions were better analysed with a framework of polar question bias, defined by e.g. Romero (2015) as FALSUM and VERUM questions. Looking more closely at *wh*-questions with rhetorical questions, I then argued that there were in fact two separate accounts of rhetorical *wh*-questions required. The pragmatic accounts posited in the literature by Rohde (2006), Caponigro and Sprouse (2007) and Biezma and Rawlins (2017) I argue are appropriate for cases where the correct partition of the *wh*-word in the rhetorical question is available for both conversation participants either in the common ground or in the evidential context surrounding the interaction.

However, I presented evidence not previously considered in the literature to suggest that the traditional cases of polarity flipped rhetorical *wh*-questions in fact behave differently, and require a separate analysis. For one, these interpretations always imply an answer of the opposite polarity, which is not the case when simply filling in a known variable. Secondly, these polarity flipped interpretations have a ‘generic’ aspect in which some approximation of all or some approximation of none of the set is implied as the answer. Furthermore, multiple *wh*-questions and *wh*-in-situ questions can have rhetorical interpretations, but not in cases where one or more of the *wh*-words is meant to indicate the ‘generic’ polarity flipped *wh*. Finally, I carried out an experiment, the results of which I presented in section 6.3. I showed that the ‘generic’ polarity flipped rhetorical *wh*-questions were relatively acceptable as the complements of *because* clauses, indicating that they are behaving more like something denoting a proposition than a regular question. They were not as acceptable as regular declaratives, but more so than polar rhetorical questions.

In this section, then, I take the evidence presented above to develop an analysis for rhetorical *wh*-questions. This will account for both the standard specific cases which have a pragmatic analysis, and these ‘generic’ interpretations.

### 6.4.1 Kotek (2016)

I take Kotek (2016) as my starting point for the analysis of rhetorical *wh*-questions presented here. Kotek (2016) develops a straightforward three-part syntax and semantics for *wh*-questions which she argues accounts for a wider range of *wh*-question phenomena than other previous accounts: superiority effects, presuppositions of question meaning, the possibilities of both single-pair and pair-list readings for multiple *wh*-questions and intervention effects. While Kotek therefore deals with a number of important phenomena, and includes special cases of quiz questions and nested *wh*-questions, she does not discuss rhetorical *wh*-questions. I will show how her framework can be adopted to both account for the standard pragmatic rhetorical *wh*-questions as well as the ‘generic’ cases that I set out above. Important in this analysis will be the observation of Caponigro and Sprouse (2007) that rhetorical *wh*-questions in English only have single-pair readings and not pair-list readings.

#### The three components of a *wh*-interrogative

In order to derive all of the possible *wh*-questions, Kotek proposes a question semantics based on the idea of Rooth-Hamblin alternatives (Hamblin 1973, Rooth 1992). With Rooth-Hamblin alternatives, as well as the ordinary domain of interpretation associated with each node in a structure, there is also a focus semantic value. The availability of these focus alternatives in a separate domain has been posited to account for focus semantics as well as the role of the *wh*-variable in echo questions, for example.

(389) [Sally]<sub>F</sub> doesn't like chocolate.

(390) Piotr likes [who]<sub>F</sub>?

Firstly, Kotek (2016) argues that *wh*-words are elements that introduce alternatives at this focus semantic level. In the ordinary domain, the variable has no value – it is undefined (Ramchand 1997, Beck 2006). At the focus semantic level, however, alternatives will be introduced as in (391), where <sup>o</sup> signals the ordinary semantic value, and <sup>f</sup> signals the focus semantic value.

(391)  $\llbracket \text{who} \rrbracket^o = \text{undefined}$

$\llbracket \text{who} \rrbracket^f = \{x : x \in \text{human}\}$  (Kotek 2016)

The second element of Kotek's account is the interrogative complementizer in C, which simply triggers interrogative movement. For *wh*-questions, this means that a *wh*-



word must move to the specifier of C in the syntax; furthermore, a singular *wh*-word must be pronounced at PF in this high position. Other movements to CP can take place covertly at LF, but these will be realised at PF in their original position. This is a straightforward syntax for *wh*-words. The interrogative complementizer does not contribute anything to the semantics under Kotek’s account – it simply passes up whatever denotation it receives from its sister.

$$(392) \llbracket C \rrbracket = \lambda P . P$$

The interrogative complementizer passes the denotation up to the final piece in Kotek’s puzzle: the ALTSHIFT operator, situated in CP.

$$(393) \begin{aligned} \llbracket \text{ALTSHIFT } \alpha_\sigma \rrbracket^o &= \llbracket \alpha_\sigma \rrbracket^f \\ \llbracket \text{ALTSHIFT } \alpha_\sigma \rrbracket^f &= \{ \llbracket \text{ALTSHIFT } \alpha_\sigma \rrbracket^o \} \end{aligned}$$

The proposition  $\alpha$  that is passed up to the ALTSHIFT operator has an ordinary value; however, this is undefined due to the undefined nature of the *wh*-word. ALTSHIFT then takes the alternatives from the focus domain of the proposition  $\alpha$ , and shifts them into the ordinary domain, so as the ordinary meaning of the proposition and specifically of the *wh*-word becomes the meaning of the alternatives posited in the particular world, as opposed to the undefined variable. For example, if  $\alpha$  is a question like *Who won the race?*, the ordinary value of this is undefined. The focus value of  $\alpha$  in this case would be something like the set of propositions {Jake won the race, Yuji won the race, Sadie won the race}. After the ALTSHIFT operator is applied, as the output, the ordinary value of the question would then be the set of propositions.

For an ordinary *wh*-question then, the derivation at LF proceeds bottom up as shown in Figure 6.4.

At the point of C’<sub>1</sub> in Figure 6.4, the denotation is straightforward and purely in the ordinary domain, as shown in (394).

$$(394) \llbracket C'_1 \rrbracket^o = \lambda w. \text{ Sally order } x \text{ in } w$$

Once this variable  $x$  is abstracted over, it composes with the set of pizzas available in the world, i.e. *which pizza*. However, as *which pizza* at this point only has meaning in the focus domain, the ordinary meaning is undefined here, in C’<sub>2</sub>. There is only a meaning in the focus domain, as shown in (395).

$$(395) \begin{aligned} \llbracket C'_2 \rrbracket^o &= \text{undefined} \\ \llbracket C'_2 \rrbracket^f &= \{ \lambda w. \text{ Sally order } x \text{ in } w : x \in \text{pizza} \} \end{aligned}$$

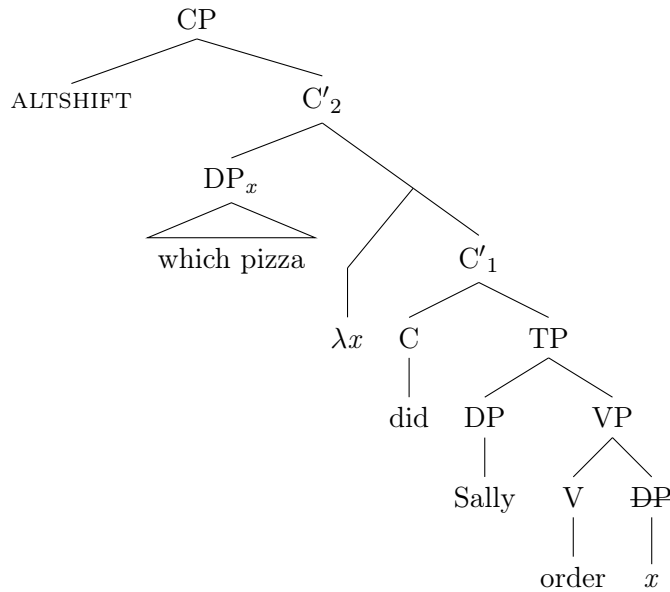


Figure 6.4: The LF realisation for a straightforward *wh*-question, as posited by Kotek (2016).

Finally, the ALTSHIFT operator is situated above the *wh*-word in the CP. It takes the focus alternatives shown in (395) and shifts them so as they become the ordinary meaning of the question, as shown in (396). The focus value of CP is the same as the ordinary meaning.

$$(396) \llbracket \text{CP} \rrbracket^\circ = \{ \lambda w. \text{ Sally order } x \text{ in } w : x \in \text{pizza} \}$$

The set of possible answers therefore might look something like:

$$\{ \lambda w. \text{ Sally order margherita in } w, \lambda w. \text{ Sally order funghi in } w, \lambda w. \text{ Sally order pineapple in } w \}$$

One of these will be the true and maximally informative answer in a regular *wh*-question and it is up to the addressee to provide that answer.

While this is straightforward for simplex *wh*-questions, Kotek's main concern is dealing with multiple *wh*-questions. Kotek (2016) demonstrates that the semantics laid out above can be used to deal with both single-pair and pair-list readings of multiple *wh*-questions, both superiority obeying – in which the higher base-generated *wh*-element is raised to C, as in (397) – and superiority violating – in which the lower base-generated *wh*-element is raised to C, as in (398).

$$(397) \text{ Which person } \text{which person} \text{ ordered which pizza?} \qquad \text{superiority obeying}$$

(398) Which pizza did which person order ~~which pizza?~~ superiority violating

The availability of pair-list readings for superiority violating *wh*-questions is debatable. While Kotek (2016) and Pesetsky (2000) clearly support the idea that these readings are available, Boškovič (2001) and Elliott (2015) posit accounts for multiple *wh*-questions in which the pair-list reading is blocked in superiority violating contexts. Nicolae et al. (2017) present the results of experimental work suggesting that in general, there is acceptability of these constructions, but less so than pair-list readings for superiority obeying *wh*-questions. Furthermore, they show that the availability of superiority violating *wh*-questions may be subject to intra-speaker variation. I therefore note the possible variation in acceptability, and set this issue aside in my adoption of Kotek (2016). I will not discuss her analysis for superiority violating *wh*-questions in any detail here.

Single-pair readings, as briefly discussed above, are cases of multiple *wh*-questions in which there is a single-pair of individuals that equate to the true and informative answer to the *wh*-question. For example, with regard to (397), where there was a world with three individuals in the domain of ‘people’ {Olivia, Sally, Eden} and three individuals in the domain of ‘pizza’ {margherita, funghi, pineapple}, there would be nine possible single-pair answers. The question is therefore a set of propositions:

{  $\lambda w$ . Olivia order margherita in  $w$ ,  $\lambda w$ . Olivia order funghi in  $w$ ,  $\lambda w$ . Olivia order pineapple in  $w$   $\lambda w$ . Sally order margherita in  $w$ ,  $\lambda w$ . Sally order funghi in  $w$ ,  $\lambda w$ . Sally order pineapple in  $w$ ,  $\lambda w$ . Eden order margherita in  $w$ ,  $\lambda w$ . Eden order funghi in  $w$ ,  $\lambda w$ . Eden order pineapple in  $w$  }

The addressee chooses the true and informative answer from this set of propositions, which Kotek describes as ‘flat’ as they are unordered.

As seen in Figure 6.5, with a single-pair reading in a superiority obeying multiple *wh*-question, both *wh*-words are in the CP at LF, with the upper  $DP_x$  moved overtly in the syntax and pronounced in CP, while the lower  $DP_y$  is moved covertly at LF and pronounced in its base-generated position.

Importantly, there is still one ALTSHIFT operator that scopes over the whole question. This means that the two variables combine with each other in the bottom up composition before their alternatives are shifted into the ordinary domain, as shown in examples (399-401).

(399)  $\llbracket C'_1 \rrbracket^o = \lambda w. x \text{ order } y \text{ in } w$

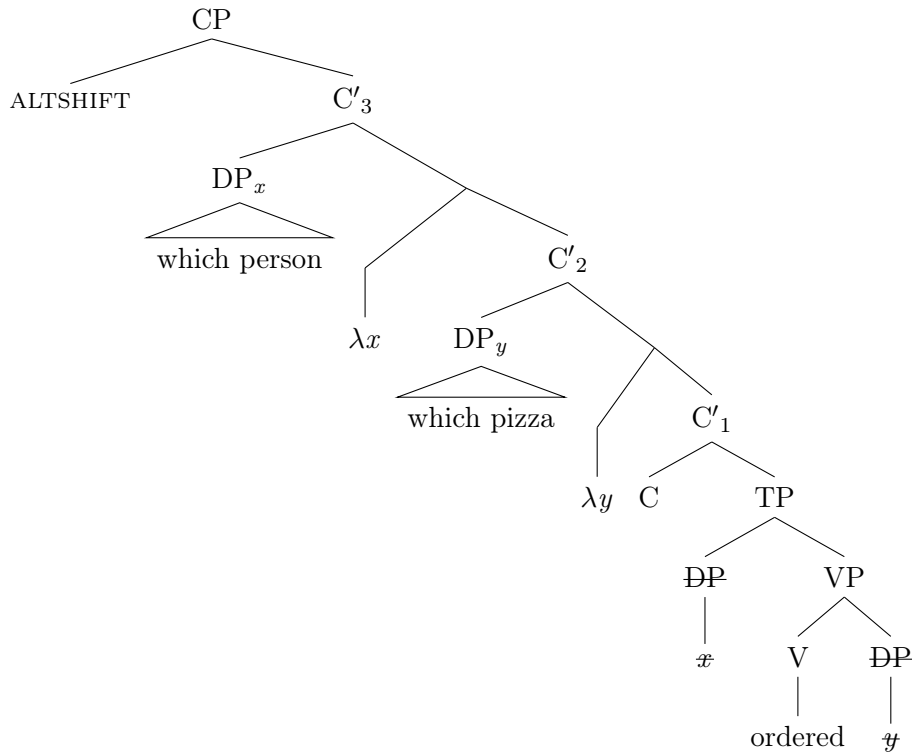


Figure 6.5: The LF realisation of a superiority obeying multiple *wh*-question with a single-pair reading, as posited by Kotek (2016).

$$(400) \llbracket C'_2 \rrbracket^o = \text{undefined}$$

$$\llbracket C'_2 \rrbracket^f = \{ \lambda w. x \text{ order } y \text{ in } w : y \in \text{pizza} \}$$

$$(401) \llbracket C'_3 \rrbracket^o = \text{undefined}$$

$$\llbracket C'_3 \rrbracket^f = \{ \lambda w. x \text{ order } y \text{ in } w : y \in \text{pizza}, x \in \text{person} \}$$

Finally, the ALTSHIFT operator takes the focus meaning from the C'\_3 and shifts the values into the ordinary meaning, giving the overall meaning of the question.

$$(402) \llbracket CP \rrbracket^o = \{ \lambda w. x \text{ order } y \text{ in } w : y \in \text{pizza}, x \in \text{person} \}$$

The question thus composes in the same way as the simple question with a single *wh*-variable, with all alternatives composed together before ALTSHIFT applies, giving a list of propositions and thus the single-pair reading.

Pair-list readings of multiple *wh*-questions are ones in which the addressee must provide a list of pairs that satisfy the presuppositions for multiple *wh*-questions posited by Dayal (2002):

- i) **Domain exhaustivity:** every member of the set quantified by the higher *wh*-word<sup>84</sup> must be paired with a member of the set quantified over by the lower *wh*-word.
- ii) **Point-wise uniqueness:** with regard to domain exhaustivity, every member of the higher set must be paired with no more than one member of the lower set.

With the multiple *wh*-question given in (397), with the same world posited above, with a domain of person individuals { Olivia, Sally, Eden } and a domain of pizza individuals { margherita, funghi, pineapple }, there are a ‘family’ of questions, to which the addressee must chose a possible answer for each one – thus providing the pair-list interpretation.

(403) **The ‘family’ of questions in the pair-list:**  $\{\{\lambda w. \text{ Olivia order margherita in } w, \lambda w. \text{ Olivia order funghi in } w, \lambda w. \text{ Olivia order pineapple in } w\}, \{\lambda w. \text{ Sally order margherita in } w, \lambda w. \text{ Sally order funghi in } w, \lambda w. \text{ Sally order pineapple in } w\}, \{\lambda w. \text{ Eden order margherita in } w, \lambda w. \text{ Eden order funghi in } w, \lambda w. \text{ Eden order pineapple in } w\}\}$

To account for pair-list readings, Kotek (2016) posits multiple ALTSHIFT operators in CP; one of which sits above the higher *wh*-word, and the other which sits between the higher and lower *wh*-words.

Unlike in single-pair readings, where the *wh*-words compose together before the alternatives are shifted into the ordinary domain, in the pair-list reading, the alternatives for the lower *wh*-word are shifted into the ordinary domain before being passed up to compose with the higher *wh*-word. The higher *wh*-word thus ‘sorts’ the question presented by the lower *wh*-word, giving the ‘family’ of questions interpretation given in (403) – the pizza individuals are sorted by the person individuals, so as each pizza is an answer option for each person.

(404)  $\llbracket C'_1 \rrbracket^o = \lambda w. x \text{ order } y \text{ in } w$

(405)  $\llbracket C'_2 \rrbracket^o = \text{undefined}$

$\llbracket C'_2 \rrbracket^f = \{ \lambda w. x \text{ order } y \text{ in } w : y \in \text{pizza} \}$

(406)  $\llbracket C'_3 \rrbracket^o = \{ \lambda w. x \text{ order } y \text{ in } w : y \in \text{pizza} \}$

$\llbracket C'_3 \rrbracket^f = \{ \lambda w. x \text{ order } y \text{ in } w : y \in \text{pizza} \}$

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<sup>84</sup>In superiority obeying *wh*-questions, this will be the subject; in superiority violating *wh*-questions this will be the object.

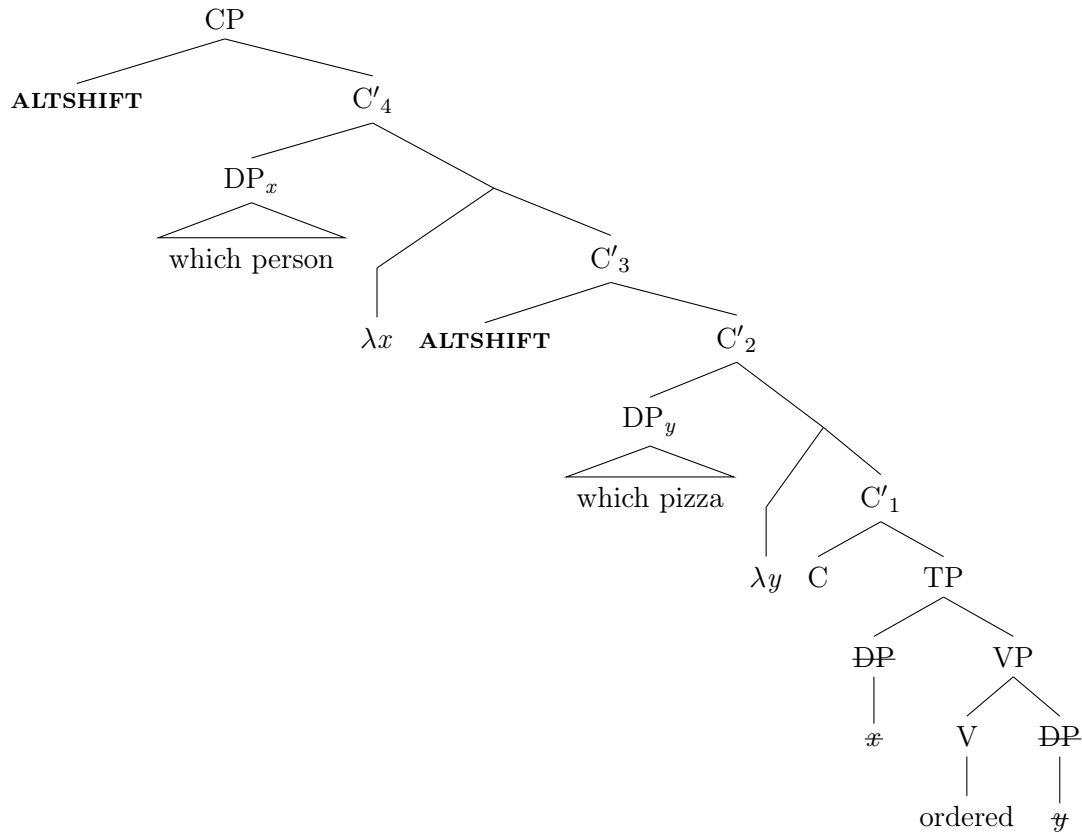


Figure 6.6: The LF realisation of a superiority obeying multiple *wh*-question with a pair-list reading, as posited by Kotek (2016).

$$(407) \llbracket C'_4 \rrbracket^o = \text{undefined}$$

$$\llbracket C'_4 \rrbracket^f = \{ \{ \lambda w. x \text{ order } y \text{ in } w : y \in \text{pizza} \} : x \in \text{person} \}$$

The composition above gives the overall meaning of the question as shown in (408).  $x$  ordered a pizza  $y$  in  $w$ , and there is a true answer for all  $x$  in in the set of people in  $w$ .

$$(408) \llbracket CP \rrbracket^o = \{ \{ \lambda w. x \text{ order } y \text{ in } w : y \in \text{pizza} \} : x \in \text{person} \}$$

Having outlined Kotek's (2016) semantics for *wh*-questions, I will now take this framework and show how both the pragmatic and 'generic' rhetorical *wh*-questions can be accounted for, as well as the restriction to single-pair multiple rhetorical *wh*-questions.

#### 6.4.2 Rhetorical *wh*-questions in Kotek's framework

The framework presented in Kotek (2016) is particularly relevant for the discussion of rhetorical *wh*-questions<sup>85</sup> because she posits different mechanisms for single-pair and pair-list readings. Recall that Caponigro and Sprouse (2007) suggest that while multiple *wh*-

questions can have rhetorical meanings, this is only the case when the readings are single-pair. These different mechanisms are thus relevant. I will first discuss the pragmatic rhetorical questions before positing an analysis for the ‘generic’ instances.

### Pragmatic rhetorical *wh*-questions

Within the semantics provided by Kotek (2016), it is relatively straightforward to deal with rhetorical *wh*-questions that imply there is a specific answer to the question already known to both speaker and addressee. I believe that in these cases, the question composes as usual as shown in Figure 6.4 and as laid out in the steps underneath.

From the question then given (e.g. *Which pizza did Sally order?!*), there is a set of possible answers { *margherita, funghi, pineapple* }. However, the correct answer is believed to be known to both conversation participants. This can be seen in the context given in (409)

(409) *Olivia and Eden are making dinner for their flatmate, Sally. Eden is not sure whether Sally would be happy if she put mushrooms in the food. The three of them had had pizza together the night before; Sally had ordered a funghi pizza. Olivia says:*

O: Come on! Which pizza did she order last night?!

The other alternatives are still shifted into the ordinary meaning of the question; however, the correct answer is known to both participants and so does not need to be responded to – the analysis can then simply proceed following a pragmatic account such as Caponigro and Sprouse (2007) or Biezma and Rawlins (2017).

With multiple *wh*-questions, the same principle applies: if only single-pair readings are available, there must only be a single ALTSHIFT operator which applies after both *wh*-variables have composed together, as in Figure 6.5. The question therefore has the semantics of a regular multiple *wh*-question but the answer is known to both conversation participants.

Pair-list readings can be ruled out by stipulating that for rhetorical *wh*-questions, only one ALTSHIFT operator ever applies – it is not possible for a second ALTSHIFT operator to be between the two *wh*-variables and therefore to compose the question as in Figure 6.6. The idea that there are some constructions which only permit single-pair readings is also

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<sup>85</sup>Mitrović (to appear) briefly mentions this possibility in his paper on Serbo-Croatian *wh*-questions; however, he does not work out any details of this analysis and opts for an analysis based on a silent *even* operator instead.

discussed in Kotek (2016), who argues that this must be the case for quiz questions like (410) and nested *wh*-questions like (411). In both cases, these are multiple *wh*-questions which can only have single-pair readings.

(410) Germany were knocked out of **which major football tournament** when they lost to **which team** in 2018?

(411) **Which striker** of **which team** scored the winning goal last night?

Kotek (2016) accounts for these by arguing that ALTSHIFT operators are only permitted in CP; quiz questions like (410) are TPs, with no *wh*-word moving to the specifier of C, and so the *wh*-words must compose together before the ALTSHIFT operator applies. Nested *wh*-questions are singular DPs; so, although the *wh*-words move to the specifier of C, the ALTSHIFT operator cannot intervene between them. There are therefore clear syntactic reasons as to why neither of these constructions can have pair-list readings. This is, however, not the case for rhetorical multiple *wh*-questions. The lack of pair-list reading cannot be so easily explained – with one *wh*-word moving overtly to the specifier of C and the other moving covertly at LF, the intervention of a second ALTSHIFT operator (as in Figure 6.5) must be blocked. I do not motivate this block here, but simply acknowledge that it must be the case.

In the same way as the single *wh*-variable questions, then, the ALTSHIFT operator applies, shifts the relevant alternatives for both *wh*-variables into the ordinary domain in order to give the meaning of the question. The true, informative values of the variables are known to both conversation participants, and thus the rhetorical question reading is accessible for the participants.

(412) *Olivia and Eden are making dinner for their flatmate, Sally. Eden is not sure whether Sally would be happy if she put mushrooms in the food. The three of them had shared pizzas together the night before: Sally had almost all of the funghi. Olivia says:*

O: Come on! Who polished off which pizza last night?!

It is therefore reasonably straightforward to deal with simple pragmatic instances of rhetorical *wh*-questions in the semantics of Kotek (2016). However, this is to be expected: they are, after all, instance of regular *wh*-questions, simply with known answers. I will now move to consider how Kotek's (2016) account can deal with the instances of rhetorical *wh*-questions that I have labelled 'generic', and that exhibit polarity flip.



### 6.4.3 ‘Generic’ rhetorical *wh*-questions

Recall that I posited there were two types of rhetorical *wh*-questions: the pragmatic ones accounted for above, and those which I described as having a ‘generic’ meaning. These are cases like the examples in (363) and (364), repeated here, in which the implied answer to the question is a) of the opposite polarity to the question itself and b) implies an approximation of the null set of possible answers, or an approximation of the full set of possible answers.

(413) What has John ever done for Sam?! (= ‘John has done nothing for Sam.’)

(414) What hasn’t John done for Sam?! (= ‘John has done everything for Sam.’)

It is worth noting once again at this point that these concepts of sets are wider than the actual members of the set. If, in the { Olivia, Sally, Eden } domain, one of the members says *Who doesn’t like pizza?!*, they do not necessarily know that all of the members of the specific group like pizza: however, they are implying that for most people, it is the case that they like pizza.

In order to account for examples like these, I posit that the ALTSHIFT operator that is the key part of Kotek’s (2016) analysis for *wh*-question meaning does not apply. This means that no alternatives are shifted into the ordinary domain, and so it is not the case that all conversation participants simply know the answer that is to be selected to fill the variable.

However, according to Kotek (2016), this would then mean that the question was undefined in its ordinary meaning. This is obviously not the case; these ‘generic’ rhetorical questions have meaning. I therefore posit that rather than being undefined (Ramchand 1997), *wh*-words are defined in their ordinary values as a null metavariable  $\varepsilon$ . The metavariable is specifically not a member of the set of things which can be denoted by the *wh*-word: such as humans for *who*, things for *what* etc.

When the alternatives are not shifted into the ordinary domain, the question still composes syntactically, with the EPP feature on C requiring a *wh*-phrase to move to and be pronounced in the specifier of C. However, the ALTSHIFT operator does not apply, leaving the ordinary meaning of the question as it is without shifting any alternatives out of the focus domain. The construction therefore never achieves the full semantics of a question i.e. is not denoted as a set of propositions; rather, it is one singular proposition. Note that in order to get the correct interpretations, the meanings of the metavariables must be defined further for each *wh*-word, as in e.g. (415-417). Beside this ordinary meaning,

there will be a set of individuals in the focus domain, but these are not put forward for interpretation.

$$(415) \llbracket \text{who} \rrbracket^o = \lambda w . \varepsilon \notin \text{human in } w$$

$$\llbracket \text{who} \rrbracket^f = \{ \text{Olivia, Sally, Eden} \}$$

$$(416) \llbracket \text{what} \rrbracket^o = \lambda w . \varepsilon \notin \text{thing in } w$$

$$\llbracket \text{what} \rrbracket^f = \{ \text{margherita, funghi, pineapple} \}$$

$$(417) \llbracket \text{where} \rrbracket^o = \lambda w . \varepsilon \notin \text{location in } w$$

$$\llbracket \text{where} \rrbracket^f = \{ \text{Edinburgh, Glasgow, Dundee} \}$$

The ordinary meaning supplied by the metavariable is downward entailing, without having to posit a collapse to a full negative operator  $\neg$  as Han (2002) does. This permits the ‘generic’ *wh*-word to license negative polarity items while this is not possible in rhetorical *wh*-question cases where the answer is known to all participants in the Common Ground (418).

$$(418) \text{Who gives a damn if you lose?!} \quad [\text{no one gives a damn, *Nikesh gives a damn}]$$

The fact that this is an emphatic context also permits for the double negation reading that licenses generic rhetorical *wh*-questions with negation in the main body of the question. The fact that there is double negation, and therefore cancellation of the negative operators, in this question means that negative polarity items are not licensed in these interrogatives (419). Note there is an acceptable reading in which the *wh*-word is not generic, and thus the negation is not cancelled.

$$(419) \text{Who doesn't give a damn if you lose?!}$$

$$[\text{Nikesh doesn't give a damn, *no one gives a damn}]$$

An alternative analysis for this type of construction posited in the literature is the idea of a silent *even* operator which targets the lowest point of some sort of relevant scale (Guerzoni 2004, Mitrović (in press)). While this can capture the generic interpretation and the NPI licensing, it cannot account for the polarity flip, nor the issues with multiple *wh*-words.

On the other hand, the lack of ALTSHIFT operator explains why it is not possible to have these ‘generic’ *wh*-words in multiple *wh*-questions. Either the operator applies, and the alternatives are shifted into the ordinary domain, or it does not, and they cannot (see the tree in Figure 6.7). It is therefore not possible to have one ‘generic’ *wh*-word and one clear focused alternative in a multiple *wh*-questions.

(420) Who danced with who first?!

= Murray danced with Brent's girlfriend, \*nobody danced with Brent's girlfriend

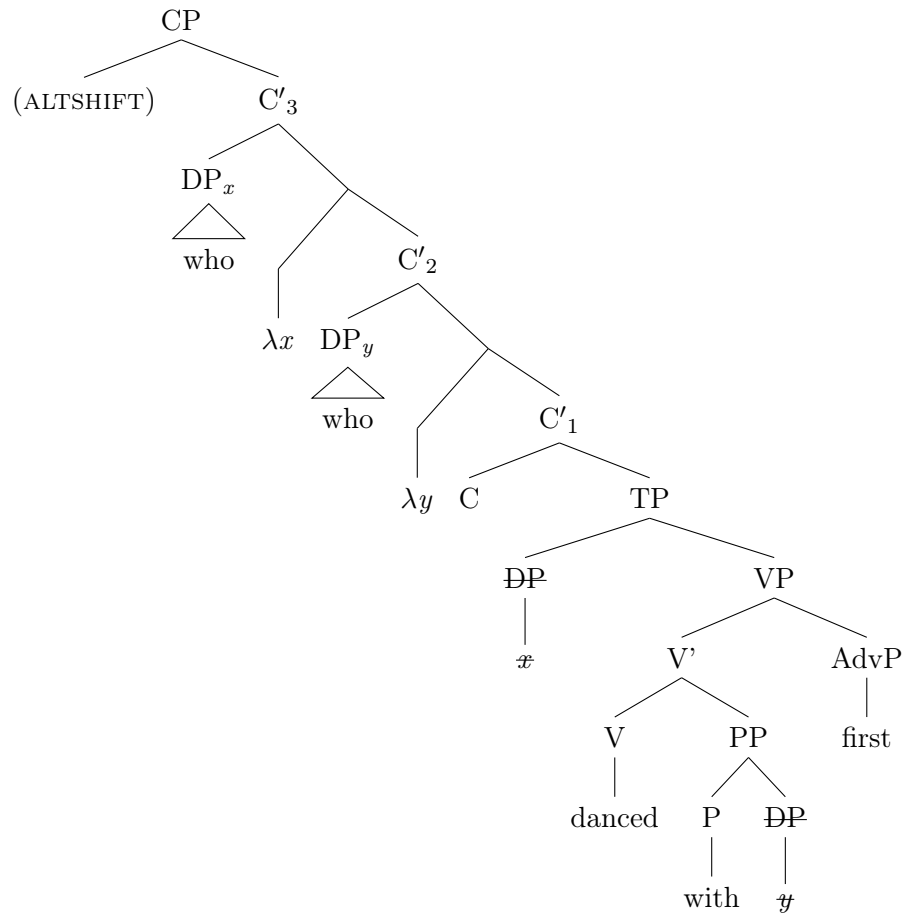


Figure 6.7: The LF representation of the rhetorical question posed in 420, showing the optionality of the ALTSHIFT operator. If the operator applies, both DPs will be shifted. If it does not, neither DP can be shifted; it is not possible for one to shift without the other.

If the ALTSHIFT operator does not apply in a multiple *wh*-question, the question has no clear interpretation. In a similar way to the fact that a conversation participant must hold an attitude towards each part of a proposition, there must be something concrete for the generic metavariable to be understood in relation to.

Throughout this analysis, I have posited that rhetorical *wh*-questions denote propositions, in part based on the results of the *because* clause experiment presented in section 6.3. One possible issue with this analysis is the fact that, although pragmatically marked, it is possible to give specific, single-word answers to ‘generic’ rhetorical *wh*-questions (421).

(421) S: Who doesn't like pizza?!

A: Amir.

This answer appears to function like a denial, in that by giving the single word answer ‘Amir’, A is rejecting the fact that there is no one in the world who doesn’t like pizza. Denials of assertions are also pragmatically marked, but of course possible. However, assertions cannot under any circumstances have single-word ‘answers’ (422). This clearly sets these rhetorical interrogative constructions apart from assertions. In this respect, then, rhetorical *wh*-questions appear to operate more like interrogatives, which challenges the idea that they are of the same type as assertions.

- (422) S:     Everyone likes pizza!  
A:     Amir doesn’t. / \*Amir.

However, I believe that the model of conversation participants’ discourse states supported in chapter 4, in which each participant has their own version of the current conversation, and of the moves that have been pushed to the QUD stack. The speaker of the rhetorical *wh*-question has chosen not to shift the alternatives into the ordinary meaning and thus push a version of the ‘question’ which is of type  $\langle s, t \rangle$  to their own stack. This may be signalled to the addressee by intonation (Dehé (2017) shows that there are specific intonation triggers for generic rhetorical *wh*-questions, but does not compare these to the intonation on specific pragmatic rhetorical *wh*-questions). However, given that the addressee has their own version of the QUD stack, it is possible for the addressee either to misinterpret the signals given by the speaker or intentionally reject these signals and push a version of the interrogative in which the focus alternatives *have* been shifted into the ordinary domain by the ALTSHIFT operator to the stack. This allows for the addressee to then give a specific answer from the domain of focus alternatives, which is highly pragmatically marked as there has been a mismatch of meaning between the speaker and the addressee – to the speaker, it is therefore a denial of the proposition they put forward; to the addressee, it is simply the answer to a regular *wh*-interrogative (for whatever pragmatic purpose). This thus accounts for the differing answering possibilities between rhetorical *wh*-questions and their assertive counterparts, despite the fact that both denote assertions.

A final note: it appears that, cross-linguistically, there is further evidence that these types of *wh*-rhetorical question are fundamentally different from the general working pragmatic definition where *p* (or the value of the *wh*-variable) is already contained within the Common Ground – for example, see Oguro (2014) on *mono ka* questions in Japanese, or Mitrović (to appear) on biased *wh*-questions in Serbo-Croatian. Exploring the strategies that languages employ to do this further could be a productive avenue for future research.

## 6.5 Conclusions

In this chapter I explored some questions around rhetorical questions that arose from earlier claims made in this thesis. Firstly, I extended my prior claim that polar rhetorical questions can be accounted for in the same framework as biased questions, showing how rhetorical questions fill the gaps in the table presented in Domaneschi et al. (2017), and following Biezma and Rawlins (2017) in claiming that these questions are all from the ‘same family’. I also showed why *wh*-questions cannot have the same analysis for their rhetorical interpretations – speakers must be able to express an attitude towards each part of a proposition in order to be biased towards its inclusion in the Common Ground, but this cannot be the case in *wh*-questions, where the *wh*-word itself is a set of propositions. This explains why Scots CHECK moves developed in polar rhetorical questions but not in *wh*-questions, and nor could they be extended to them once established.

Having argued that polar rhetorical questions were different, I then moved on to discuss rhetorical *wh*-questions in more detail. The analyses posited in the literature suggest that all rhetorical *wh*-questions can have the same pragmatic analysis – however, I presented data that was problematic for this position, showing that polarity flipped rhetorical *wh*-questions behave differently. I then presented the results of an experiment showing that these rhetorical questions behaved more like assertions in being acceptable as the complement of a *because* clause.

I developed an analysis for these ‘generic’ rhetorical *wh*-questions using Kotek’s (2016) semantics for *wh*-questions. Here, an ALTSHIFT operator normally applies in *wh*-questions to move the set of focus alternatives from the focus domain into the ordinary domain, but fails in the cases of these ‘generic’ questions. Instead, the downward entailing null metavariable  $\varepsilon$  is the underlying ordinary meaning of the *wh*-word and thus remains the ordinary meaning as no alternatives are shifted. This was able to account for the ‘generic’ quality of these rhetorical questions, their acceptability as the complement of *because* clauses, their polarity flip, and the fact that they cannot occur as one of the *wh*-words in a multiple rhetorical *wh*-question.

## Chapter 7

# Conclusions

I began this thesis with the aim of addressing a number of overarching questions at the syntax/pragmatics interface: how are non-canonical questions licensed? What sort of information is encoded semantically in these constructions? How much of this discourse information can be built into the syntax, and how does this happen? I proposed to look at this by focusing on non-canonical questions with negation, a set of constructions that show interesting relationships to polarity and to conversational goals: matrix biased questions, reverse polarity tag questions, polar rhetorical questions and interrogative exclamatives. The relevant constructions had been separated into two groups in the literature, with tag questions analysed as variants of biased questions (van Rooij and Šafářová 2003, Sailor 2011, Malamud and Stephenson 2014, Krifka 2015), and interrogative exclamatives variants of polar rhetorical questions (Zanuttini and Portner 2003, Delfitto and Fiorin 2014). I also proposed to look more closely at the relationship between the four constructions.

In order to address these overarching questions, I focused firstly on data from two Scots varieties: Glasgow Scots and Shetland dialect. Each variety has a particle (*-int* in Glasgow Scots and *-n* in Shetland dialect) that the literature suggests appears in certain types of interrogative constructions only (Robertson and Graham 1952, Thoms et al. 2013) – however, this had not been documented in any detail for either variety. My first task was therefore to establish the distribution of each particle, linking to the recent literature on non-canonical questions and speaker beliefs and evidential biases, and therefore providing a considerably more detailed understanding of these particles than in the previous literature.

In chapter 2, I presented the methodology for this research, which extended existing dialect syntax methods (e.g. Barbiers and Bennis (2007)) to take account of pragmatic and prosodic phenomena. I also considered the sociolinguistic knowledge required to accurately interpret the results of the data gathering process, positing what I

termed ‘perceptual hyperdialectalism’ by showing evidence of young Shetland dialect speakers’ hyperdialectalism through their use of rating scales to assert their identity in the face of linguistic insecurity. This gave further insight into the linguistic situation in Shetland, as well as how speakers behave in situations of dialect obsolescence.

In chapter 3 I presented the results of extensive acceptability judgment tasks that I carried out with speakers of the relevant varieties. From these results, I was able to establish the distribution of the particles: *-int* in Glasgow Scots was acceptable in tag questions with preference in neutral evidential contexts, interrogative exclamatives and polar rhetorical questions, while *-n* in Shetland dialect was acceptable in tag questions, interrogative exclamatives, polar rhetorical questions, and to some extent in matrix biased questions for older speakers.

In chapter 4, I moved on to propose an analysis of the Scots particles that engaged with the major questions from the first chapter. I firstly looked at the pragmatic distribution of the particles and showed how this agreed with and diverged from standard English. In particular, I used three tests (the ability of the speaker to attribute the belief of *p* to the addressee (and how this works for predicates of personal taste); the ability for the speaker to revise and take full responsibility for *p* in the event that the addressee is not also an independent source, and discourse closure, using the possibility of a following *so* continuation) that showed the relationship between the speaker and the addressee is crucial to the distribution of the *-int* and *-n* particles.

I then moved on to a semantic analysis, based on the interactional framework of Ginzburg (2012), and analysed the Scots particles as CHECK moves, in which the speaker has the goal of adding both *p* and  $p \in SP(a)$  to their representation of the Common Ground. I compared this analysis with the standard English canonical tag construction, which I proposed was an instance of there being a Known Answer to the proposed question, building on Reese and Asher (2006) and Gunlogson (2008). The semantic analysis for *-int* and *-n* also required refining the meaning of phenomena like ‘check’, ‘confirmation’ and ‘acknowledgment’ to show the subtle distinctions between different types of move.

Finally, I presented a syntactic analysis for the *-int* and *-n* particles. I utilised and refined the neo-performative syntax for confirmationals proposed by Wiltschko and Heim (2016) and Wiltschko (2017), and added evidence for head movement into this speech act syntax domain, thus extending work that claims that particles outwith with the traditional conceptualisation of a clause should also be treated as a regular part of the syntax (Haegeman and Hill 2013, Hill 2013, Wiltschko and Heim 2016). The

syntactic analysis I proposed accounted for the limited distribution of the *-int* and *-n* particles, particularly the data from negative anchor tag questions which was problematic for alternative approaches which took *-int* and *-n* to be negation.

Across chapters 3 and 4, then, I established the distribution of some previously understudied particles in two Scots varieties. I provided a cohesive pragmatic, semantic and syntactic analysis for the particles that showed how and where they differ from the same constructions in standard English. This data addressed my overarching questions in a number of ways: by taking into account the role of the speaker/addressee relationship in question licensing; by establishing specific semantics for CHECK moves, and by proposing that *-int* and *-n* are situated in the discourse domain in CP. I also provided evidence that specific particles could be employed in subsets of the non-canonical questions discussed that did not align with the divides presented in the literature. I thus argued that the relationship between the constructions is different, and more closely linked, than what has previously been proposed in the literature.

Following the Scots data, I addressed two more questions using data from standard English which also contributed to the overall question about the relationship between all four constructions. Firstly, in chapter 5, I presented the results of an experiment to test speakers' preferences for matrix biased questions or tag questions depending on the evidential context surrounding the interaction. This built on prior work that tested types of matrix question construction depending on evidential context (Domaneschi et al. 2017) as well as claims that had been made about the distribution of different types of tag question (Ladd 1981). I established that although both constructions are available in neutral and negative evidential contexts, speakers in both English and German have preferences as to which construction to use in which context. I showed that in standard English, this followed from the analysis of tag questions that I proposed in chapter 4. I also hypothesised about the role that the strength of belief and/or evidential context plays in the licensing of question constructions cross-linguistically through comparison of the English and German data.

Finally, in chapter 6, I turned to consider rhetorical questions. Previous work on rhetorical questions has taken polar rhetorical questions and rhetorical *wh*-questions to be amenable to the same analysis. However, the data from Scots suggested that the bias in these two constructions is not expressed in the same way. I firstly argued that polar rhetorical questions can be accounted for by a FALSUM / VERUM approach, and why this is not suitable for rhetorical *wh*-questions. I then presented an analysis for rhetorical



*wh*-questions which extended Kotek's (2016) semantics for *wh*-questions to include rhetorical questions. In this way, I was able to accommodate the standard pragmatic account of rhetorical *wh*-questions (Caponigro and Sprouse 2007, Biezma and Rawlins 2017), as well as the lack of availability of pair-list readings in rhetorical *wh*-questions pointed out by Caponigro and Sprouse (2007). Most interestingly, though, this accounted for the group of rhetorical *wh*-questions that I label 'generic'. These interrogatives were distinguished from standard rhetorical *wh*-questions by their polarity flip, their 'generic' quality and their ability to act as the complement of *because*-clauses. I proposed that these interpretations arise from the failure of Kotek's ALTSHIFT operator to apply, as opposed to standard instances of rhetorical *wh*-questions in which the answer is simply known to both participants.

I have therefore addressed a number of gaps in the literature in a timely fashion. On the theoretical side, there has been considerable interest in non-canonical questions with negation in recent years (on English alone see e.g. Sailor (2011), Repp (2013), Sudo (2013), Malamud and Stephenson (2014), Northrup (2014), Trinh (2014), Krifka (2015), Romero (2015), Biezma and Rawlins (2017), Domaneschi et al. (2017), Farkas and Roelofsen (2017), Gaertner and Gyuris (2017)). This thesis builds on this literature by considering the relationships *between* the non-canonical question constructions and arguing that, for polar cases, the same analysis is applicable to all four of the constructions in standard English. The syntax/pragmatics interface has been of considerable interest recently (e.g. Speas and Tenny (2003), Coniglio and Zegrean (2012), Haegeman and Hill (2013), Hill (2013), Haegeman (2014), Wiltschko (2017)), and I have added to those discussions by proposing head movement to the the discourse domain of the left periphery. There has also been considerable recent interest in discourse particles and their syntactic and semantic encoding (e.g. Ginzburg (2012), Rojas-Esponda (2013), Grosz (2014), Wiltschko and Heim (2016), Woods (2016), Yang and Wiltschko (2016)), and I have added to this through discussion of the Scots particles and their analysis as CHECK markers, making more specific and subtle distinctions between different types of particles used for confirming/checking/acknowledging moves. The work in this thesis also builds on the current work of the Scots Syntax Atlas project by providing in-depth syntactic judgments on two constructions and extending the dialect syntax methodology to consider specific pragmatic and prosodic variables.

Of course, there are many aspects which I have not addressed in this thesis, merely hinted at, which I believe would be fruitful lines for future study. In particular, the

relationship between polar rhetorical questions and exclamatives deserves further study: is it the case that exclamatives are like polar rhetorical questions and biased questions, simply with a POS marker (Kennedy and McNally 2005) invoked due to the scalar predicate? More investigation is required. Similarly, the roles of other non-epistemic biases (such as deontic or bouletic biases) in interrogative production should be investigated: how does a circumstantial desire for *p* to be true affect a speaker's choice of interrogative construction? There are further questions to be answered too with respect to rhetorical questions: what is the effect of something like *after all* with regards to the semantics of the proposition it is attached to? In the Scots varieties investigated here there are also further questions as to the development of the *-int* and *-n* particles, and also in general to do with the development of the negation patterns we see in Scots – why does Scots use verb-subject-*no* for biased questions and true negative questions, while there is a high/low negation split in standard English? These questions could be addressed with larger historical corpora. I believe that this could tie into a wider investigation in to the cross-linguistic development of negation in biased questions when a language's progress through the Jespersen Cycle is taken into account.

Overall, I hope that this research helps push towards a broader research programme that builds on and extends the work by Sudo (2013), Domaneschi et al. (2017) and Gaertner and Gyuris (2017), who all take the position that at least all information-seeking polar interrogatives can be accounted for in terms of speaker beliefs and evidential biases. The contributions that I have made here indicate that considering these phenomena in a gradient manner (rather than in a binary positive / negative fashion) will incorporate a wider range of non-canonical questions (e.g. polar rhetorical questions), as well as showing the potential for links between the constructions. The Scots data in particular indicate that different varieties can develop different particles to express different points and combinations of points of the scale; furthermore, the discussion of CHECK and 'confirmational' moves etc. demonstrates that there can be very subtle distinctions in what particles within a variety express. I thus believe that this would be a positive programme for future cross-linguistic study on the topic.

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# Appendix A

This appendix includes all of the materials used in the Scots data collection from chapters 2 and 3. It also includes the forms that participants in both Glasgow and Shetland were given prior to and following data collection.

- i) Key to codes in materials
- ii) Materials for data collection
- iii) Pre-task information sheet
- iv) Consent form
- v) Background information questionnaire
- vi) Post-task debrief

Code	Type of example
<b>TEST ITEMS</b>	
DT	Declarative –n / –int
DS	Declarative standard
NQT	Negative question –n / –int
NQS	Negative question standard
WHSNT	Subject wh-question, negative context, –n / –int
WHSNS	Subject wh-question, negative context, standard
WHONT	Object wh-question, negative context, –n / –int
WHONS	Object wh-question, negative context, standard
WHSRT	Subject wh-question, rhetorical, –n / –int
WHSRS	Subject wh-question, rhetorical, standard
WHORT	Object wh-question, rhetorical, –n / –int
WHORS	Object wh-question, rhetorical, standard
ET	Exclamatives, –n / –int
ES	Exclamatives, VSno
EB	Exclamatives, –n / –int V no
PNXRT	Positive anchor tag, neutral context, rising intonation, –n / –int
PNXFT	Positive anchor tag, neutral context, falling intonation, –n / –int
PNXRB	Positive anchor tag, neutral context, rising intonation, –n / –int V no
PNXFB	Positive anchor tag, neutral context, falling intonation, –n / –int V no
PNXRS	Positive anchor tag, neutral context, rising intonation, VSno
PNXFS	Positive anchor tag, neutral context, falling intonation, VSno
PNZRT	Positive anchor tag, negative context, rising intonation, –n / –int
PNZFT	Positive anchor tag, negative context, falling intonation, –n / –int
PNZRB	Positive anchor tag, negative context, rising intonation, –n / –int V no
PNZFB	Positive anchor tag, negative context, falling intonation, –n / –int V no
PNZRS	Positive anchor tag, negative context, rising intonation, VSno
PNZFS	Positive anchor tag, negative context, falling intonation, VSno
NNXRT	Negative anchor tag, neutral context, rising intonation, –n / –int
NNXFT	Negative anchor tag, neutral context, falling intonation, –n / –int
NNXRB	Negative anchor tag, neutral context, rising intonation, –n / –int V no
NNXFB	Negative anchor tag, neutral context, falling intonation, –n / –int V no
NNXRS	Negative anchor tag, neutral context, rising intonation, VS
NNXFS	Negative anchor tag, neutral context, falling intonation, VS
NNZRT	Negative anchor tag, negative context, rising intonation, –n / –int
NNZFT	Negative anchor tag, negative context, falling intonation, –n / –int
NNZRB	Negative anchor tag, negative context, rising intonation, –n / –int V no
NNZFB	Negative anchor tag, negative context, falling intonation, –n / –int V no
NNZRS	Negative anchor tag, negative context, rising intonation, VS
NNZFS	Negative anchor tag, negative context, falling intonation, VS
QNXRT	Biased question, neutral context, rising intonation, –n / –int
QNXFT	Biased question, neutral context, falling intonation, –n / –int
QNXRB	Biased question, neutral context, rising intonation, –n / –int V no
QNXFB	Biased question, neutral context, falling intonation, –n / –int V no
QNXRS	Biased question, neutral context, rising intonation, VSno
QNXFS	Biased question, neutral context, falling intonation, VSno
QNZRT	Biased question, negative context, rising intonation, –n / –int
QNZFT	Biased question, negative context, falling intonation, –n / –int
QNZRB	Biased question, negative context, rising intonation, –n / –int V no

QNZFB	Biased question, negative context, falling intonation, –n / –int V no
QNZRS	Biased question, negative context, rising intonation, VSno
QNZFS	Biased question, negative context, falling intonation, VSno
RQRT	Rhetorical question, rising intonation, –n / –int
RQFT	Rhetorical question, falling intonation, –n / –int
RQRB	Rhetorical question, rising intonation, –n / –int V no
RQFB	Rhetorical question, falling intonation, –n / –int V no
RQRS	Rhetorical question, rising intonation, VSno
RQFS	Rhetorical question, falling intonation, VSno
IT	Imperative, –n / –int
IS	Imperative, don't/dunna
<b>FILLER ITEMS</b>	
UG	Ungrammatical filler
FQ	Polar question filler
FDQ	Declarative question filler
FWHS	Subject wh-question filler
FWHO	Object wh-question filler
FNC	Negative concord filler
FDN	Declarative no filler
FA	Amn't filler
FEM	Epistemic mustn't filler
FH	Havna filler
FN	Needna filler
FM	Michtna filler
FNVR	Never filler
FWHE	Wh-exclamative filler
FMAN	Mind and no filler
FMNA	Mind no and filler
FDMA	Don't mind and filler
FGN	Gonnae no filler
FRNZR	Right, negative context, rising intonation
FRNXR	Right, neutral context, rising intonation
FRNZF	Right, negative context, falling intonation
FRNXF	Right, neutral context, falling intonation
FRTF	–n / –int, right, falling intonation
FRTR	–n / –int, right, rising intonation
FNITWH	Negative imperative, 2nd person subject, high
FNITWL	Negative imperative, 2nd person subject, low
FNIQH	Negative imperative, quantifier phrase subject, high
FNIQL	Negative imperative, quantifier phrase subject, low
FNITRH	Negative imperative, 3rd person subject, high
FNITRL	Negative imperative, 3rd person subject, low

**SESSION 1**

<b>DT1</b>	We are meant to be going to the cinema this evening, but you have forgotten that you have to go to a birthday. You say:	<b>I kint/can'n come.</b>
<b>DT2</b>	I tell you that we should leave at 7 to be in town for 8. You say:	<b>I dint/do'n think we need to leave that early.</b>
<b>DS1</b>	We are getting a train together. I arrive at the station. You are already there. I ask you what platform the train is leaving from. You say:	<b>I havnae/havna checked yet.</b>
<b>DS2</b>	Your friend is coming to meet us for lunch. We are both there but she is not. I ask you if she might have forgotten. You say:	<b>I widnae/widna think so.</b>
<b>NQT1</b>	We are organising a birthday party for a friend. We are looking at the event page. I tell you that James can't come. You open the "not attending" list and see James and our friend Jenny. You say:	<b>Kint/Can'n Jenny come either?</b>
<b>NQT2</b>	You give me a list of a few things to get from the shop because I am going anyway. I come back with a carrier bag for you and tell you that there wasn't any cheese. You look through it and say:	<b>Dint/Do'n they have bread either?</b>
<b>NQS1</b>	You are telling me and one of our friends that a friend of yours has invited you to go rock climbing. However, you hate heights. Our friend says "well, I just wouldn't go". You ask me:	<b>Would you no go either?</b>
<b>NQS2</b>	We are at a dance in the local hall. You say you are going to get some raffle tickets. I say I will come up with you. You ask me:	<b>Have you no bought any either?</b>
<b>WHSNT1</b>	We are organising a trip for some local young people. I say I have spoken to a couple of families and that some people are not able to come. You get out a piece of paper to write things down and then you ask me:	<b>So, who kint/can'n come?</b>
<b>WHSNT2</b>	I am going away for a few days and I ask you to water some plants for me. Some are cacti though and don't need watered. You ask me:	<b>So which ones dint/do'n need any water?</b>
<b>WHSNS1</b>	We have booked for a group of seven of us to do a bungee jump. However, on the day, they tell us they only have room for six people. We have to decide who can't come. You say to me:	<b>Who widnae/widna want to do it?</b>
<b>WHSNS2</b>	You come in as I am watering the plants in my windowsill. I ask if you can help me do the last few. You agree, and say:	<b>Which ones havnae/havna been watered already?</b>
<b>WHONT1</b>	You are making a big dinner and I tell you I am allergic to some types of shellfish. You say:	<b>Ok, what kint/can'n you eat?</b>
<b>WHONT2</b>	You are explaining a puzzle to me, but I am still looking blank. You say:	<b>What bit dint/do'n you understand?</b>
<b>WHONS1</b>	We are looking for places to stay on holiday. You say:	<b>So, where would you no consider?</b>
<b>WHONS2</b>	We are on holiday. You are joining me for dinner, having just arrived; I have been in the town for a couple of days already. We are trying to find a restaurant. You say:	<b>So, where have you no been yet?</b>
<b>WHSRT1</b>	We are talking about a book that I had to read at school. I ask if you read it too and you say:	<b>Who dint/did'n have to read it?</b>

SESSION 1

<b>WHSRT2</b>	We are organising a birthday party. You have spoken to all of our friends to see if they can come, and everyone was able to come. I ask you who is able to come to the party and you say:	<b>Who <i>kint/can'n</i> come?!</b>
<b>WHSRS1</b>	I am telling you about something embarrassing that I did earlier. To try and make me feel better, you say:	<b>Who <i>hasnae/hasna</i> done that?!</b>
<b>WHSRS2</b>	I want to ask you if you want to go on holiday with me. I am not sure if you want to, but when I do ask you, you are very enthusiastic and you say:	<b>Who <i>widnae/widna</i> want to go?!</b>
<b>WHORT1</b>	We have a mutual friend who seems to be really good at everything. She runs, plays in a band and bakes. As well as all this, I tell you that she recently won a poetry competition. You say:	<b>Wow, what <i>kint/can'n</i> she do?!</b>
<b>WHORT2</b>	I am telling you about all the things I did on holiday. You have also been to the same place, and it seems like I have mentioned everything there is to do there. You say:	<b>Wow, what <i>dint/did'n</i> you do?</b>
<b>WHORS1</b>	You are telling me about some restaurants in town. I ask which ones you have been to, and you say:	<b>Where have I <i>no</i> been?!</b>
<b>WHORS2</b>	I am telling you about a friend of mine who always takes on challenges when drunk. I list a long list of silly things that he has done, and you say:	<b>Jeez, what would he <i>no</i> do?!</b>
<b>ET1</b>	I ran a charity 10k this weekend. You came to support me. I surprised myself, and managed to finish in the top 10. When I approached you after the race, you said:	<b>Dint/Did'n you do well!</b>
<b>ET2</b>	I am talking about a winter a few years ago when the weather was really bad for months. We were both snowed in for a few days at a time. You say:	<b>Wint/Wis'n that a terrible winter!</b>
<b>ES1</b>	You are boasting that you can make a really hot chilli. You serve me some, and I try it. My eyes start watering because of the spiciness. You say:	<b>Is it <i>no</i> hot!</b>
<b>ES2</b>	I tell you I have been baking, and to come round to get some cakes. You turn up, and every surface in the kitchen is covered with different types of scones, cakes and biscuits. You say:	<b>Have you <i>no</i> been busy!</b>
<b>EB1</b>	We went to see one of our favourite bands last weekend. They were on top form, and it was a really good set. We are talking about the gig afterwards, and I say I really enjoyed it. You say:	<b>Dint/Did'n they <i>no</i> sound great!</b>
<b>EB2</b>	We are talking about a teacher we had at school. She always looked out for people and helped us if we were stuck. You say:	<b>Wint/Wis'n she <i>no</i> so helpful!</b>
<b>PNXRT1</b>	Our friend Marie really likes action films. Last weekend we saw the new James Bond film, and thought it was action-packed. I say to you that I am thinking of inviting Marie to come with me to see the Bond film. You say:	<b>Oh yeah, she would love it, <i>wint/wid'n</i> she?</b>
<b>PNXRT2</b>	At some point in the past, our friend Sarah told us she had been to Edinburgh Castle. You are trying to work out whether it is worth going to visit. You ask me for advice, and I say "you should ask Sarah". You say:	<b>Oh yeah, she's been before, <i>hint/is'n</i> she?</b>

SESSION 1

<b>PNXFT1</b>	You are pretty sure that you have seen that I have a driving license. We agree to help one of our friends move house; we will rent a van to move some boxes. You say to me:	<b>You can drive, kint/can'n you?</b>
<b>PNXFT2</b>	Our friend Robert doesn't eat meat, but he does eat fish. There is some haddock in the freezer. I am trying to work out what to cook when he comes round for dinner. You say:	<b>Well, he eats fish, dint/does'n he?</b>
<b>PNXRB1</b>	You ordered a jumper but it's too big. You are thinking about giving it to one of our friends instead and you say:	<b>She would like it, wint/wid'n she no?</b>
<b>PNXRB2</b>	You are pretty sure you have seen photos of me on Facebook where I am wearing glasses. You are going to get a new pair. You say:	<b>You've got glasses, hint/ir'n you no?</b>
<b>PNXFB1</b>	We are arranging a party, and there are a few things we still need to get. A while before, we had arranged that I would get the glasses. You say:	<b>You can get the glasses, kint/can'n you no?</b>
<b>PNXFB2</b>	I am talking about one of my old jobs. I have not worked there for a while, but you remember I seemed to like working there. You say:	<b>You had a good time there, dint/did'n you no?</b>
<b>PNXRS1</b>	I really like films with Angelina Jolie in them. A friend of ours is telling us about her most recent film they went to see the other day. When the friend leaves, you say to me:	<b>You would like that film, would you no?</b>
<b>PNXRS2</b>	I've been reading this series of books, and you see an advert for one on the TV. You want to check that it's the same series, so you say:	<b>You've been reading those books, have you no?</b>
<b>PNXFS1</b>	We have been invited to a party. The invitation says 8pm but from experience, you know that people don't usually turn up til nearer 9pm. You say:	<b>We can be a bit late, can we no?</b>
<b>PNXFS2</b>	The local charity 10k is coming up soon. You think I ran it last year. You are thinking about entering and are looking for some advice; you say:	<b>You ran it last year, did you no?</b>
<b>PNZRT1</b>	You say that you are thinking about getting a particular book for our friend Jamie for Christmas. I ask if you are sure about that. You say:	<b>He would like that, wint/wid'n he?</b>
<b>PNZRT2</b>	We are going out for a coffee and need to choose where to go. You suggest a cafe down the road, but I pull a face. You say:	<b>They've got good cakes there, hint/ir'n they?</b>
<b>PNZFT1</b>	We are going to a party. The invitation says 8pm, but you suggest turning up at 9pm. I say no, that we should be on time but you say to me:	<b>We can be a little bit late, kint/can'n we?</b>
<b>PNZFT2</b>	Last week on my Facebook you saw a post about going to see the newest James Bond film. You ask me about a character from the film, and I say "I don't know". You say:	<b>You saw the film last week, dint/did'n you?</b>
<b>PNZRB1</b>	You think that our friend Mary really likes animals. You have just got some pet rats and you suggest that you will invite Mary to see them. I say "to see some rats?!" and you say:	<b>She would like them, wint/wid'n she no?</b>
<b>PNZRB2</b>	You have seen photos of me on Facebook where I am wearing glasses. You are going to get a new pair and you ask where I got mine. I look blank. You say:	<b>You've got glasses, hint/ir'n you no?</b>



**SESSION 1**

<b>PNZFB1</b>	You have bought lots of ingredients to make us dinner tonight, something we planned a while ago. You mention this to me, and I looked shocked, like I have forgotten. You say:	<b>You can come, kint/can'n you no?</b>
<b>PNZFB2</b>	It seems like everyone watches Game of Thrones. You start watching it, what feels like ages after everyone else. You start talking to me about an episode and I look confused. You say:	<b>You watch it, dint/do'n you no?</b>
<b>PNZRS1</b>	You are telling me that you are doing a sponsored bungee jump. I say I would be really scared and I couldn't do it. You say:	<b>But you would do it for charity, would you no?</b>
<b>PNZRS2</b>	You ask me to help you change the oil in your car. I agree. I am poking around under the bonnet, and I laugh and say that I don't know what I'm doing. You say:	<b>You've done this before, have you no?</b>
<b>PNZFS1</b>	You need to get a ticket for the dance at the hall tonight. You tell me this and I say you can't get them anymore. You say:	<b>You can usually get some on the door, can you no?</b>
<b>PNZFS2</b>	We are out for a drink, and you are getting a round at the bar, including a vodka and lemonade that you think I asked for. When you come back to the table, you tell me what you have got me. I say "lemonade?". You say:	<b>You asked for lemonade, did you no?</b>
<b>NNXRT1</b>	I am telling you about the two things I want to go to this Saturday night. One starts at 6 and finishes at 9; the other starts at 8. You say:	<b>Ah, so you widnae/widna be able to go to both, wint/wid'n you?</b>
<b>NNXRT2</b>	You are talking about a new pub in town that only opened last weekend. You are about to tell me what it is like, but before you do, you just check and say:	<b>You havnae/irna been yet, hint/ir'n you?</b>
<b>NNXFT1</b>	You tell me a story about someone you used to work with. My jaw drops and you say:	<b>You cannae/canna believe it, kint/can'n you?</b>
<b>NNXFT2</b>	You are talking about a few of our friends who have been playing together in a 5-a-side football team. It doesn't seem like they've been doing very well, and you say:	<b>They didnae/didna win their game last week, dint/did'n they?</b>
<b>NNXRB1</b>	A friend of ours has been telling us about a wildlife programme they watched recently that had a lot of spiders in it. You know I hate spiders. When our friend leaves, you say to me:	<b>You widnae/widna have liked that programme, wint/wid'n you no?</b>
<b>NNXRB2</b>	For some months, there was a cat that would sit outside my door. You would always say hi to it. However, you realise you haven't see it for a while. You come in and you say:	<b>That cat hasnae/isna been here for a while, hint/is'n it no?</b>
<b>NNXFB1</b>	You are pretty sure our friend Bill is allergic to peanuts, but you want to make sure before you make dinner. You say to me:	<b>Bill cannae/canna eat peanuts, kint/can'n he no?</b>
<b>NNXFB2</b>	You are pretty sure I take black tea, but before you make me a cup you say:	<b>You don't/dunna take milk in your tea, dint/do'n you no?</b>
<b>NNXRS1</b>	I am telling you about my upcoming weekend. I say that there is a possibility I won't be able to make it to one of my closest friend's birthday party. You say:	<b>Oh no! You widnae/widna want that, wid you?</b>
<b>NNXRS2</b>	We are discussing one of our friends who recently broke up with her partner and is . You say:	<b>She hasnae/isna got a boyfriend now, has/is she?</b>

**SESSION 1**

<b>NNXFS1</b>	We are looking after some children for the afternoon. They are being really loud and you have told them to shush but they haven't. You say:	<b>They cannae/canna just be quiet, can they?</b>
<b>NNXFS2</b>	I went fishing the other day. I have already told you that it was an unsuccessful trip. We are discussing the trip with another friend, and you say:	<b>You didnae/didna catch anything, did you?</b>
<b>NNZRT1</b>	We are talking about a friend who is very reserved and shy. I tell you that he is planning to get a tattoo this weekend. You say:	<b>He widnae/widna get a tattoo, wint/wid'n he?</b>
<b>NNZRT2</b>	One of our friends loves dogs, but is allergic to them. She has always wanted one, but has always said she couldn't. I tell you that I recently saw her out walking a dog. You say:	<b>She hasnae/isna gone and got a dog, hint/is'n she?</b>
<b>NNZFT1</b>	We are talking about a wedding that we went to. You feel like it happened yesterday, but I say "it was three years ago". You say:	<b>It cannae/canna have been that long, kint/can'n it?</b>
<b>NNZFT2</b>	Our friend Kev has always preferred rugby to football. However, one day we are on the street, and we see him in a Aberdeen football shirt. You say:	<b>Kev doesnae/doesa like football, dint/does'n he?</b>
<b>NNZRB1</b>	We are heading to a buffet with friends, but we are running late. I am sure they will leave us some, but you are less sure. You say:	<b>They widnae/widna eat it all, wint/wid'n they no?</b>
<b>NNZRB2</b>	Our friend Paula is very against tattoos and has always said she would never get one. We are discussing tattoos. I say "oh, did you hear about Paula by the way?!". You say:	<b>No? She hasnae/isna got a tattoo, hint/is'n she no?</b>
<b>NNZFB1</b>	It's really hard to find parking around my house; there are lots of double yellow lines everywhere. Sometimes at weekends and public holidays, it is ok, but it's not often. I have come round to yours and have parked outside the door. You say:	<b>You cannae/canna park there, kint/can'n you no?</b>
<b>NNZFB2</b>	We are watching a local football match. Our team has a significant lead. You have to leave to go and meet a friend. When I meet you the next day, I say "it was such a shame about the football". You say:	<b>They didnae/didna lose, dint/did'n they no?</b>
<b>NNZRS1</b>	Our friend Claire is very busy and is always out of her house. I tell you Claire is thinking about getting a puppy. You say:	<b>She widnae/widna have time for a puppy, wid she?</b>
<b>NNZRS2</b>	We were at a party at the weekend. You seem to have lost your jacket. You don't think you will get it back, and then I say that I found a jacket after the party. You say:	<b>You havnae/irna got my jacket, have/ir you?</b>
<b>NNZFS1</b>	We are having a meeting about the community hall. A while ago, the chair of the committee said he couldn't come. I say something about how the chair will be bringing cakes to the meeting. You say:	<b>He cannae/canna come, can he?</b>
<b>NNZFS2</b>	You told me a secret about one of our friends, and told me not to tell anyone. I agreed. Next time I see her, however, she tells me that you mentioned it to her. Later, you say to me:	<b>You didnae/didna tell her, did you?</b>

**SESSION 1**

<b>QNXRT1</b>	We are organising a party. Earlier, we spoke to our friend Jim. He said he would be at the party. Now, we are going to make a list of everyone who is able to come so that we know the numbers for making food. I say "where do we start?". You say:	<b>Well, kint/can'n Jim come?</b>
<b>QNXRT2</b>	Last week I went to a new pizza restaurant in town; I told you that it was really good and I really enjoyed it. My friend is in town for a couple of days and she is looking for restaurant recommendations, so I am asking you for advice. You say:	<b>Dint/did'n you like that pizza place?</b>
<b>QNXFT1</b>	Our friend plays for a local hockey team. They are having a charity fundraiser in the local hall, and I tell you that she said we should come because "it will be an amazing night". You say:	<b>Wint/Wid'n she say that?</b>
<b>QNXFT2</b>	I mentioned earlier in the week that I had bought a ticket to a local festival. You have been given some free tickets for the festival and want to check I don't need one, so you say to me:	<b>Hint/Ir'n you already got one?</b>
<b>QNXRB1</b>	The other day I told you you could borrow a copy of a DVD I have. It is lying out on the table at my house, and you want to check that it is ok to take it before you pick it up, so you say:	<b>Kint/Can'n I no borrow this?</b>
<b>QNXRB2</b>	At some point recently, you glanced at something on Facebook; it seems like I went to see the new Bond film, although I haven't specifically told you this. You tell me that you are thinking of going to see it. You say:	<b>Dint/Did'n you no see it last week?</b>
<b>QNXFB1</b>	Our friend Karen likes cats. You have got two new kittens; they are very cute. I come round and say that you should invite Karen to see them. You say:	<b>Wint/Wid'n she no love them?</b>
<b>QNXFB2</b>	You mention that you went to cafe in town for lunch the other day. You think I've been before, and you want to ask what I think of it, so first you say:	<b>Hint/Ir'n you no been there before?</b>
<b>QNXRS1</b>	A while ago, I told you I would be able to pick up your cousin from the airport. Now, you tell me that she is arriving tomorrow and you say:	<b>Can you no pick her up?</b>
<b>QNXRS2</b>	Our friend Jenny is wearing a scarf. You think you remember me giving it to her for Christmas. You say:	<b>Did you no get Jenny that scarf?</b>
<b>QNXFS1</b>	Our friend Rab hates spiders. There was a nature programme on last night that spoke about tarantulas for ages. You say:	<b>Wid Rab no have hated it?</b>
<b>QNXFS2</b>	We are going out for a coffee and need to choose a place. I suggest a cafe down the road. You have been there before, and you say:	<b>Have they no got good cakes there?</b>
<b>QNZRT1</b>	You are organising a birthday party for one of our closest friends. I have clicked "maybe attending" on Facebook. You say:	<b>Kint/Can'n you come?</b>
<b>QNZRT2</b>	You say that you are making our friend Robert fish and chips for dinner. I say "but Robert's a vegetarian". You say:	<b>Dint/Does'n he eat fish?</b>

**SESSION 1**

<b>QNZFT1</b>	We are organising a dinner party for one of our friends. You say our friend Laura will definitely come, but I say she is extremely busy just now. You say:	<b>Wint/Wid'n she make time?</b>
<b>QNZFT2</b>	The other week I told you I was going to go to the new Indian restaurant down the road. Now, you are thinking about going. You ask me if the new Indian restaurant is good and I say I don't know. You say:	<b>Hint/Ir'n you been?</b>
<b>QNZRB1</b>	We are arranging the party and there are a few things we still need to get. I said I would get the glasses, but I seem to keep putting it off. You say:	<b>Kint/Can'n you no get the glasses?</b>
<b>QNZRB2</b>	You have made a pot of tea, and you offer me some. I say no thanks. You say:	<b>Dint/Do'n you no drink tea?</b>
<b>QNZFB1</b>	You say you want organising a murder mystery party. You assume I will be able to come, but I start making excuses. You say:	<b>Wint/Wid'n you no come?</b>
<b>QNZFB2</b>	A big group of our friends are going to a concert together. The tickets have sold out. You say to me "oh, the tickets have sold out now" and I say "wait, what?". You say:	<b>Hint/Ir'n you no got a ticket?</b>
<b>QNZRS1</b>	You are making dinner for our friend Kathy, who is a fussy eater, but you think pasta is a safe choice. You tell me you are going to make pasta. I say "pasta?!" and you say:	<b>Can she no eat pasta?</b>
<b>QNZRS2</b>	We have organised a retirement party for someone at work. I was tasked with buying the gift. It is 6pm on the day of the party and you ask me where the present is. I say "what present?". You say:	<b>Did you no buy the present?</b>
<b>QNZFS1</b>	You show me a t-shirt online that you want to buy for one of our friends' birthdays. I say that I am not sure about it. You say:	<b>Would he no like it?</b>
<b>QNZFS2</b>	You complement one of our friends on what looks like a new haircut. She looks confused but says thank you. When she leave, you say to me:	<b>Has she no had a haircut?</b>
<b>RQRT1</b>	I am submitting a large piece of work. A while ago, when I started working on it, you said "oh, you'll be fine!". On the day I hand in, I meet you and say that I have submitted. You say:	<b>Dint/Did'n I tell you it would be easy?!</b>
<b>RQRT2</b>	We are at a show. I have entered some photos in a photography competition. I tell you I could win in one of the rounds. It is the last round to be judged. However, I have lost all the rounds so far. I am looking pretty dejected, so you say:	<b>Cheer up! Kint/Can'n you still win the last one?! Yes.</b>
<b>RQFT1</b>	We are looking for a cake for our friend's daughter's birthday. She is a huge fan of Justin Bieber. We both know that; we have bought her Bieber presents in the past. You find a Justin Bieber cake and you say to me:	<b>Wint/Wid'n she just love it?! We have to get it.</b>
<b>RQFT2</b>	I tell you that I have just been to the new Chinese restaurant up the road. You say "oh yes, I went there a while ago, it was alright". We need to pick somewhere to go for lunch, and I suggest the same Chinese place. You say:	<b>Hint/Ir'n you just been there?! Can we go somewhere else?</b>

**SESSION 1**

<b>RQRB1</b>	I tell you that I went to a cafe down the road yesterday. We are trying to decide where to go for coffee. I suggest the same cafe. You don't really like it, and you say:	<b>Dint/Did'n you no go there yesterday?! We should go somewhere else.</b>
<b>RQRB2</b>	I tell you I am very good at dancing. We are at a dance together, and I get up on the floor. Sure enough, I am pretty good. When I come off the dancefloor, you say:	<b>Well! Kint/Can'n you no dance?!</b>
<b>RQFB1</b>	I really hate spiders. You tell me that there have been three in your bathroom in the last week. I shudder and you say:	<b>Wint/Wid'n you hate that?!</b>
<b>RQFB2</b>	We saw the horror film The Ring together years ago. I say that I am going to watch a horror film tonight and I don't really like them so I'm a bit scared. When you ask which film it is, and I tell you, you say:	<b>Hint/Ir'n you no seen that already?! It can't be that scary then.</b>
<b>RQRS1</b>	We are running late to meet my friend for dinner. I call her and say that we are running late; she seems to be fine. I am still nervous that she will be annoyed we are late. You say:	<b>Did you no tell her and it was fine?</b>
<b>RQRS2</b>	We are both taking part in a charity 10k. I am playing it cool beforehand, but I finish the race in a really fast time. After the race, you say:	<b>Well! Can you no run?!</b>
<b>RQFS1</b>	We are talking about a friend of ours who is really theatrical and lots of fun. I say he would be good in a pantomime. You say:	<b>Would he no just?!</b>
<b>RQFS2</b>	I am just back from my holidays. I had a great time, I am very tanned. Later that day, I say to you "I can't wait to get away again". You say:	<b>Have you no just been on holiday?! It's my turn.</b>
<b>IT1</b>	I am at your house. There is a batch of shortbread sitting out. I mention this, and you say:	<b>Dint/Do'n eat any! It's for later.</b>
<b>IT2</b>	We are watching the Olympics on TV. I say I'm going to change the channel and you say:	<b>Dint/Do'n change it! Murray's up next.</b>
<b>IS1</b>	We are at a concert and I get pushed in front of you. You say:	<b>Don't/Do'n stand there, I can't see!</b>
<b>IS2</b>	I am at your house. You have put some biscuits out. I help myself and you say:	<b>Don't/Do'n eat them all!</b>
<b>UG1</b>	We are in the shop. You spot the date on a loaf of bread and say:	<b>Out of date isnae/isna this bread?</b>
<b>UG2</b>	You are making a cup of tea. You say to me:	<b>Milk havnae/havna you?</b>
<b>UG3</b>	We are walking down the street. You spot a man with a silly hat. You say to me:	<b>What a not silly hat!</b>
<b>UG4</b>	We have just left a really boring party, and are walking home. You say to me:	<b>How not a fun night was that!</b>
<b>UG5</b>	We are speaking about going to the cinema tonight. We have almost made a full plan when you say:	<b>Wait – actually I not can go.</b>
<b>UG6</b>	I am making dinner for our friend Sophie, and I tell you I am thinking about making fish. You say:	<b>She not does like fish.</b>
<b>UG7</b>	We are trying to decide what to go and see at the cinema tonight. You say to me:	<b>What see would like you?</b>
<b>UG8</b>	I am taking part in a sweepstake for the Euro football championship at my work. You say:	<b>Who pick have you?</b>

**SESSION 1**

<b>UG9</b>	I am running late to meet you for dinner. I call you to let you know I am on the way and you say:	<b>Do no rush, I'm not in a hurry</b>
<b>UG10</b>	We are going to the pub for some drinks with friends. On the way you have to stop to tie your shoelace, but you say:	<b>Do no worry, I'll catch you up.</b>
<b>UG11</b>	We are in the park. It's a beautiful, sunny day and you say:	<b>What a lovely day it is!</b>
<b>UG12</b>	You tell me that someone we know has just won a couple of hundred pounds on the lottery. You say:	<b>Wow, how nice for her!</b>
<b>FQ1</b>	We are at the park. You decide to go and get an ice cream from the ice cream. You say to me:	<b>Do you want anything?</b>
<b>FQ2</b>	You are thinking about going to Majorca on holiday. You are not sure if I have been there before, so you say to me:	<b>Have you been to Majorca?</b>
<b>FQ3</b>	You are going through to the kitchen to make a cup of tea. You say to me:	<b>Can I get you a cup?</b>
<b>FQ4</b>	We are trying to organise which bus to get to come back from our holiday. You are suggesting one at 10am, but I look a bit sceptical. You say:	<b>Would you rather leave later?</b>
<b>FDQ1</b>	We are listening to the radio and a really cheesy old pop song comes on. I start singing along and you say:	<b>You like this song!?</b>
<b>FDQ2</b>	We are about to head down to the pub for some drinks. I say I'll just go and grab my coat. When I come back, I'm wearing a ridiculous, massive pink and orange striped jacket. You say:	<b>You're wearing that?!</b>
<b>FDQ3</b>	I am telling you a story about how I was out with a friend at the weekend. He had to rush off to get a bus home. You say:	<b>He didnae/didna wait for you?</b>
<b>FDQ4</b>	We are heading to the pub tonight; there's a football game on. I really want to get a good seat, so I want to go down early, at 7. You want to go at 7.30. I am very unsure, and you say:	<b>You cannae/canna be a little bit late?</b>
<b>FWHS1</b>	We are preparing things for a wedding and assigning everyone who is helping out different roles. You say:	<b>Right, so, who can bake?</b>
<b>FWHS2</b>	You are about to paint your living room and are trying to decide between two colours. You want to know my opinion, so you say:	<b>Which one is best?</b>
<b>FWHS3</b>	You have been on holiday, and have bought a selection of souvenirs for people you know. You are trying to decide what to give each person. You hold up a little candle and say:	<b>Who would like this?</b>
<b>FWHS4</b>	We are going down to set up an event in the local hall. There is a group of us walking down the road, carrying a lot of things. When we get to the door of the hall, you say:	<b>Right, who's got the keys?</b>
<b>FWHO1</b>	We are looking after one of our friend's children for the afternoon. He's got a 50p and we take him down to the shop. You say to the shop assistant:	<b>What can he get with his 50p?</b>
<b>FWHO2</b>	We have decided we are going to go out for dinner. You say:	<b>Where would you like to eat?</b>
<b>FWHO3</b>	One of our friends is always going on holiday, never to the same place. She's just back from somewhere again, but you're not sure where, so you say to me:	<b>Where did she go this time?</b>

**SESSION 1**

<b>FWHO4</b>	Our friend's birthday is coming up. I say I have got him a present, and you say:	<b>What have you got him?</b>
<b>FNC1</b>	We are out playing football. My ankle has been sore for a while, and it starts hurting again while we're playing. I want to continue playing but you say:	<b>I widnae/widna do nothing more, you don't want to make it worse.</b>
<b>FNC2</b>	You are watching the Olympics. I come in and ask you how the team is doing today. You say:	<b>We havnae/irna won nothing so far.</b>
<b>FNC3</b>	It's a really nice day so we go out for a walk up a hill. When we come back, I am covered in midgie bites. You say:	<b>That's funny, I didnae/didna get nae bites.</b>
<b>FNC4</b>	Our friend Frank is coming for dinner; he's allergic to nuts. I ask what I should cook him; you say:	<b>Well, he cannae/canna eat nae nuts.</b>
<b>FDN1</b>	We are looking after our friend's child this afternoon. We are trying to think of things to do, and I suggest going to the play park up the road. You say:	<b>Good idea, we've no taken him there before.</b>
<b>FDN2</b>	You arrive at my house; it's really windy and it's been raining really heavily. You're soaked. You say:	<b>It's no a very nice day!</b>
<b>FA1</b>	I'm not very tall, and there's a book up on a really high shelf I want to reach. I ask you to help me, and you say:	<b>I amnae/amna that tall either!</b>
<b>FA2</b>	You are meant to be meeting us for a drink at the pub later, but you are having to stay late at work. You phone me and say:	<b>I'm going to be too late to meet you all, amnae/am'n I?</b>
<b>FEM1</b>	We are heading out to the football pitch. We are meeting our friend Tom there; however, from the window of my house, I can't see anyone there yet. You say:	<b>He mustnae/mustna be there yet.</b>
<b>FEM2</b>	We arrive at a leaving party for a colleague of mine; however, she is nowhere to be seen. You say:	<b>She must've left already, mustnae/mustna she?</b>
<b>FH1</b>	We are getting some drinks at a party we have organised. You say:	<b>We havnae/havna any beer left.</b>
<b>FH2</b>	I really want to meet up with a friend of ours who is moving away, before she moves. However, you say:	<b>She hasnae/havna the time.</b>
<b>FN1</b>	We are having a last minute planning meeting for an event we're organising. There are only a few things to do, but I tell you one of our friends is planning on coming all the way here to help. You say:	<b>She neednae/needna come all this way, there's not that much to do.</b>
<b>FN2</b>	We are making bunting for a fair. I am cutting out the triangles; you stop me and say:	<b>They neednae/needna be that big or they won't hang properly!</b>
<b>FM1</b>	We are organising a birthday party for our friend Jill. I suggest that we should have an 80s theme. You say:	<b>She michtnae/michtna want that...</b>
<b>FM2</b>	We are looking for a DVD at your house because you seem to have lost it. You say:	<b>It michtnae/michtna even be here.</b>
<b>FNVR1</b>	I ask why you ignored me on the street earlier and you say:	<b>I never saw you.</b>
<b>FNVR2</b>	We are discussing Andy Murray's latest final. We were watching it together, but I had to go out. I ask you what happened and you say:	<b>He never won in the end.</b>
<b>FWHE1</b>	We are on a day trip to the beach. It is really hot and sunny. You say:	<b>What a beautiful day!</b>

**SESSION 1**

<b>FWHE2</b>	We are watching the X Factor and there is a young girl who starts singing. She has a beautiful voice and you say:	<b>What an amazing voice!</b>
<b>FMAN1</b>	There are lots of cables all over the floor in the garage. I am going to get some tools from there and you say:	<b>Watch and no trip over those wires!</b>
<b>FMAN2</b>	I am telling you a very far-fetched story about someone I work with. You say:	<b>Away and no talk nonsense!</b>
<b>FMNA1</b>	I say I will give you a lift into town tomorrow morning. However, I have a track record of forgetting when I have said this, so before I leave, you say:	<b>Mind no and forget this time!</b>
<b>FMNA2</b>	I am bringing through a tray with cups of tea from the kitchen and I trip over the door frame. I don't fall, but you say:	<b>See no and drop it!</b>
<b>FDMA1</b>	I am showing how much hair I want to get cut off, and I am holding the scissors very close to my hair. You are worried I am going to cut it accidentally, so you say:	<b>Don't mind and cut your hair!</b>
<b>FDMA2</b>	I am talking about going out on a boat on a loch this weekend. You say:	<b>Don't watch and go by yourself!</b>
<b>FGN1</b>	We are outside a pub and I light up a cigarette. You notice this and say:	<b>Gonnae no smoke!</b>
<b>FGN2</b>	We are organising a party, and I want to invite someone you don't get on with particularly well. You say:	<b>Gonnae no invite him!</b>
<b>FGN3</b>	I am making you a cup of tea. You say:	<b>Gonnae you no put milk in it!</b>
<b>FGN4</b>	I am at your house, but I say that I really need to get going. It's raining really heavily so you say:	<b>Gonnae you no go out now!</b>
<b>FRNZR1</b>	You want to buy a shirt for our friend Tom for his birthday. You have chosen one you think he will like, but when you show me I look unimpressed. You say:	<b>He would like it, right?</b>
<b>FRNZR2</b>	We are on the way to the train station and you want to stop off to get a coffee on the way. I look at my watch and say "are you sure?". You say:	<b>We have time, right?</b>
<b>FRNXR1</b>	Our friend David is coming over. You are running low on milk, but you know you can ask him to get some on the way over. You are looking in the fridge and you say to me:	<b>David can pick up milk, right? So then we'll have some tea.</b>
<b>FRNXR2</b>	I tell you about someone I know who went on a short holiday to France, and came back convinced she could speak French. You used to do French and you say:	<b>I did French at school, right? Doesn't mean I'm fluent!</b>
<b>FRNZF1</b>	We are waiting to hear when our friend is going to sit his driving test. He said it would be in the next two weeks, but two weeks have now passed. You say:	<b>He would have told us, right?</b>
<b>FRNZF2</b>	We are at the beach and it is really hot. You are sure you packed suncream, but I am searching in the bags and I say "I think we're going to get burned!". You say:	<b>We've got suncream, right?</b>
<b>FRNXF1</b>	We need to print some tickets. You know that I have a printer so you say:	<b>We can print them at yours, right?</b>



**SESSION 1**

<b>FRNXF2</b>	Our friend has me for advice about whether she should start going to a dancing class on Thursday nights. You know I go to the class, and so you decide to ask me what I think about it. You say:	<b>You do that dance class, right?</b>
<b>FRTF1</b>	We are organising with a group of friends to go away for the weekend. Everyone else has said they are happy for us to sort out the details. We have come up with a plan we think is pretty good. You say:	<b>They would be happy with all this, wint/wid'n they right?</b>
<b>FRTF2</b>	You need to wrap up a birthday present, but you've run out of tape. You are going to go to the shop to get some, so you say to me:	<b>They've got Sellotape at the shop, hint/ir'n they right?</b>
<b>FRTR1</b>	We are talking about taking part in the Race for Life. You want to walk, which you are pretty sure is ok, but you want to check. You say:	<b>You can walk it, kint/can'n you right?</b>
<b>FRTR2</b>	You are telling me about the latest James Bond film. You are pretty sure that I saw some of the other Daniel Craig ones, so you say:	<b>You saw Skyfall, dint/did'n you right?</b>
<b>FNITWH1</b>	I am meant to be giving you a lift tomorrow, but I am quite forgetful. You say:	<b>You don't/dunna forget!</b>
<b>FNITWH2</b>	We are organising a surprise party for our friend Sarah. I find it hard to keep secrets! I am meeting up with Sarah tonight and before I go you say:	<b>You don't/dunna tell her about the party!</b>
<b>FNITWL1</b>	You have lent me a book. I am a bit forgetful and tend to misplace things. When you give me the book, you say:	<b>Don't/Dunna you lose it!</b>
<b>FNITWL2</b>	We're meeting up to get some lunch but I am running late. I phone you to apologise and you say:	<b>Don't/Dunna you rush! It's fine.</b>
<b>FNIQH1</b>	We are at your house when the doorbell rings. A few people get up to answer it, but you say	<b>Evdy don't/dunna go, I'll get it.</b>
<b>FNIQH2</b>	You are asking a group of our friends for directions to get somewhere. Everyone starts trying to tell you, at the same time. You say:	<b>Evdy don't/dunna talk aa at the same time!</b>
<b>FNIQL1</b>	We are at your house and you say "I left the crisps in the kitchen". We all make a move to go and get them, and you say:	<b>Don't/Dunna evdy get up!</b>
<b>FNIQL2</b>	You say that you have a spare ticket to a concert this weekend. The group of friends we are with start getting excited, but you say:	<b>Don't/Dunna evdy get excited! There's only one ticket.</b>
<b>FNITRH1</b>	You are in charge of organising a surprise party. You are giving out instructions to our friends who are helping out on the night. You say:	<b>Kim don't/dunna forget her corkscrew, Sam don't/dunna forget his tablecloth!</b>
<b>FNITRH2</b>	You are arranging some people for a group photo. You say:	<b>Tall people don't/dunna stand at the front!</b>
<b>FNITRL1</b>	We are looking after our friend's children for the afternoon. We have got them some juice and biscuits, but they don't seem to be sharing. You say:	<b>Don't/Dunna James drink all the juice and don't/dunna Natalie eat all the biscuits!</b>
<b>FNITRL2</b>	You are helping out at a friend's show. They aren't quite ready for people in the hall, so you say:	<b>Don't/Dunna folk with tickets take their seats just yet.</b>

**SESSION 2**

<b>DT3</b>	I say that I am thinking about getting an iPhone. I ask you which one I should get. You say:	<b>I wint/wid'n get any of them.</b>
<b>DT4</b>	We are organising a birthday party for our friend. You said you would check and see if she was free. I ask you if you have heard from her. You say:	<b>I hint/im'n asked her yet.</b>
<b>DS3</b>	We are meant to be going to the beach today. When you get up in the morning it is raining heavily. You call me and say:	<b>We cannae/canna go to the beach today.</b>
<b>DS4</b>	My DVD player is broken. You offer to give me your old one. You say:	<b>I don't/dunna use it very often.</b>
<b>NQT3</b>	You are telling me and our friend about a party you have been invited to but you say that you will not know anyone there, and you have to get up really early the next day. You ask us whether you should go. Our friend says "well I wouldn't". You ask me:	<b>Wint/Wid'n you go either?</b>
<b>NQT4</b>	You are telling me and one of our friends that you are going to a popular restaurant in town tonight. Our friend says "I've never been there before". I say "Tell us what it's like!". You ask:	<b>Hint/Ir'n you been either?</b>
<b>NQS3</b>	We are at a concert with a couple of friends. We have ended up sitting near the back. Our friend Sarah is quite short, and is having to stretch to try and see. I am also quite short. You ask me:	<b>Can you no see either?</b>
<b>NQS4</b>	Our friend is talking to a group of us about Game of Thrones. You have never seen it. I am also looking blank. You say to me:	<b>Do you no watch it either?</b>
<b>WHSNT3</b>	You want to organise a dinner for some of our friends, but everyone seems to be really busy just now. You decide to pick next Saturday, and you ask me:	<b>So who wint/wid'n be able to come that day?</b>
<b>WHSNT4</b>	You are handing out sweets to a group of children. You want to make sure you give them out fairly so you say:	<b>Ok, who hint/is'n got any yet?</b>
<b>WHSNS3</b>	We are organising a dinner and I am listing a lot of people who are going to be there. You seem a bit stressed by how many people are coming, and you say:	<b>Ok, so who cannae/canna make it?</b>
<b>WHSNS4</b>	You are making dinner for a group of us. Some people are vegetarian, but you don't know who. When you bring out the food, you say:	<b>Who doesnae/doesna eat meat?</b>
<b>WHONT3</b>	We are walking around at a fair and there is a table with lots of free food samples. I want to try them all. I ask you to pick one up for me. You say:	<b>What hint/ir'n you tried yet?</b>
<b>WHONT4</b>	My birthday is coming up. You want to organise to do something, so you give me a lot of options. I'm looking overwhelmed so you decide to narrow it down and you say:	<b>What wint/wid'n you want to do?</b>
<b>WHONS3</b>	We have just come out of seeing a film and I say that I hated it. You say to me:	<b>What did you no like about it?</b>
<b>WHONS4</b>	I have got a gift voucher for my birthday. It can be spent in a few different places in town, but I tell you there are some restrictions. You say to me:	<b>Where can you no use it?</b>
<b>WHSRT3</b>	I am telling you about something embarrassing that I did earlier. To try and make me feel better, you say:	<b>Who hint/is'n done that?!</b>

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<b>WHSRT4</b>	I want to ask you if you want to go on holiday with me. I am not sure if you want to, but when I do ask you, you are very enthusiastic and you say:	<b>Who <i>wint/wid'n</i> want to go?!</b>
<b>WHSRS3</b>	We are talking about a book that I had to read at school. I ask if you read it too and you say:	<b>Who <i>didnae/didna</i> have to read it?</b>
<b>WHSRS4</b>	We are organising a dinner party. You have spoken to all of our friends, and everyone has said they will be able to come to the party. I ask you who is able to come, and you say:	<b>Who <i>cannae/canna</i> come?!</b>
<b>WHORT3</b>	You are telling me about some restaurants in town. I ask which ones you have been to, and you say:	<b>Where <i>hint/im'n</i> I been?!</b>
<b>WHORT4</b>	I am telling you about a friend of mine who always takes on challenges when drunk. I list a long list of silly things that he has done, and you say:	<b>Jeez, what <i>wint/wid'n</i> he do?!</b>
<b>WHORS3</b>	We have a mutual friend who seems to be really good at everything. She runs, plays in a band and bakes. As well as all this, I tell you that she recently won a poetry competition. You say:	<b>Jeezo, what can she <i>no</i> do?!</b>
<b>WHORS4</b>	I am telling you about all the things I did on holiday. You have also been to the same place, and it seems like I have mentioned everything there is to do there. You say:	<b>Jeezo, what did you <i>no</i> do?</b>
<b>ET3</b>	It is an amazing, sunny day, and you are having a really great day. I bump into you on the street. I am wearing sunglasses and eating an ice cream. You say:	<b>Int it a lovely day!</b>
<b>ET4</b>	We are watching The X Factor and there is a young girl singing. She is 16 and she sounds like Adele. You say:	<b>Hint/Is'n she got an amazing voice!</b>
<b>ES3</b>	We were both at the same wedding last weekend. We are discussing it the next week and I mention that I think the bride's dress was nice. You say:	<b>Did she <i>no</i> look beautiful!</b>
<b>ES4</b>	I am showing you some old school photos. There is a boy in the back row of the photo who is standing head and shoulders above everyone else. You say:	<b>Was he <i>no</i> tall!</b>
<b>EB3</b>	It is very windy and rainy outside. You can hear it on the windows. I arrive at your house, soaked, and you say:	<b>Int/Is'n it <i>no</i> horrible out there!</b>
<b>EB4</b>	I recently got a puppy. You saw me on the day I got it; it was tiny. I see you again about a month later, and the puppy is a lot bigger! You say to me:	<b>Hint/Is'n he <i>no</i> grown!</b>
<b>PNXRT3</b>	We are organising a party. Earlier, we spoke to our friend James. He said he would be at the party. Now, we are going to make a list of everyone who is able to come so that we know the numbers for making food. I say "so, who can come?". You say:	<b>Well, James can come, <i>kint/can'n</i> he?</b>
<b>PNXRT4</b>	Last week I went to a new pizza restaurant in town; I told you that it was really good and I really enjoyed it. My friend is in town for a couple of days and she is looking for restaurant recommendations, so I am asking you for advice. You say:	<b>You liked that pizza place, <i>dint/did'n</i> you?</b>
<b>PNXFT3</b>	Our friend plays for a local hockey team. They are having a charity fundraiser in the local hall, and I tell you that she said we should come because "it will be an amazing night". You say:	<b>Well, she would say that, <i>wint/wid'n</i> she?</b>

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<b>PNXFT4</b>	I mentioned earlier in the week that I had bought a ticket to a local festival. You have been given some free tickets for the festival and want to check I don't need one, so you say to me:	<b>You've got one already, hint/ir'n you?</b>
<b>PNXRB3</b>	The other day I told you you could borrow a copy of a DVD I have. It is lying out on the table at my house, and you want to check that it is ok to take it before you pick it up, so you say:	<b>I can borrow this, kint/can'n I no?</b>
<b>PNXRB4</b>	At some point recently, you glanced at something on Facebook; it seems like I went to see the new Bond film, although I haven't specifically told you this. You tell me that you are thinking of going to see it. You say:	<b>You saw it last week, dint/did'n you no?</b>
<b>PNXFB3</b>	Our friend Karen likes cats. You have got two new kittens; they are very cute. I come round and say that you should invite Karen to see them. You say:	<b>Oh yeah, she would love them, wint/wid'n she no?</b>
<b>PNXFB4</b>	You mention that you went to cafe in town for lunch the other day. You think I've been before, and you want to ask what I think of it, so first you say:	<b>You've been there before, hint/ir'n you no?</b>
<b>PNXRS3</b>	A while ago, I told you I would be able to pick up your cousin from the airport. Now, you tell me that she is arriving tomorrow and you say:	<b>You can pick her up, can you no?</b>
<b>PNXRS4</b>	Our friend Jenny is wearing a scarf. You think you remember me giving it to her for Christmas. You say:	<b>You got Jenny that scarf, did you no?</b>
<b>PNXFS3</b>	Our friend Rab hates spiders. There was a nature programme on last night that spoke about tarantulas for ages. You say:	<b>Rab would have hated it, would he no?</b>
<b>PNXFS4</b>	We are going out for a coffee and need to choose a place. I suggest a cafe down the road. You have been there before, and you say:	<b>They've got good cakes there, have they no?</b>
<b>PNZRT3</b>	You are organising a birthday party for one of our closest friends. I have clicked "maybe attending" on Facebook. You say:	<b>You can come, kint/can'n you?</b>
<b>PNZRT4</b>	You say that you are making our friend Robert fish and chips for dinner. I say "but Robert's a vegetarian". You say:	<b>He eats fish, dint/does'n he?</b>
<b>PNZFT3</b>	We are organising a dinner party for one of our friends. You say our friend Laura will definitely come, but I say she is extremely busy just now. You say:	<b>She would make time, wint/wid'n she?</b>
<b>PNZFT4</b>	The other week I told you I was going to go to the new Indian restaurant down the road. Now, you are thinking about going. You ask me if the new Indian restaurant is good and I say I don't know. You say:	<b>But you've been, hint/ir'n you?</b>
<b>PNZRB3</b>	We are arranging the party and there are a few things we still need to get. I said I would get the glasses, but I seem to keep putting it off. You say:	<b>You can get the glasses, kint/can'n you no?</b>
<b>PNZRB4</b>	You have made a pot of tea, and you offer me some. I say no thanks. You say:	<b>You drink tea, dint/do'n you no?</b>
<b>PNZFB3</b>	You say you want organising a murder mystery party. You assume I will be able to come, but I start making excuses. You say:	<b>You would come, wint/wid'n you no?</b>

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<b>PNZFB4</b>	A big group of our friends are going to a concert together. The tickets have sold out. You say to me "oh, the tickets have sold out now" and I say "wait, what?". You say:	<b>You've got a ticket, hint/ir'n you no?</b>
<b>PNZRS3</b>	You are making dinner for our friend Kathy, who is a fussy eater, but you think pasta is a safe choice. You tell me you are going to make pasta. I say "pasta?!" and you say:	<b>She can eat pasta, can she no?</b>
<b>PNZRS4</b>	We have organised a retirement party for someone at work. I was tasked with buying the gift. It is 6pm on the day of the party and you ask me where the present is. I say "what present?". You say:	<b>You bought the present, did you no?</b>
<b>PNZFS3</b>	You show me a t-shirt online that you want to buy for one of our friends' birthdays. I say that I am not sure about it. You say:	<b>He would like it, would he no?</b>
<b>PNZFS4</b>	You complement one of our friends on her new haircut. She looks confused but says thank you. When she leave, you say to me:	<b>She's had a haircut, has she no?</b>
<b>NNXRT3</b>	You are organising a party. I told you a couple of weeks ago that I didn't think I would be able to come. It is a couple of days before the party, and you say to me:	<b>You cannae/canna come to the party, kint/can'n you?</b>
<b>NNXRT4</b>	You are talking about an episode of a show you watched last night. You are pretty sure I was out at the pub last night. You say:	<b>You didnae/didna see it, dint/did'n you?</b>
<b>NNXFT3</b>	You bought a book recently that you really hated. You tell me that you were thinking of recommending it to our friend Paul but you say:	<b>He widnae/widna like it either, wint/wid'n he?</b>
<b>NNXFT4</b>	There is a concert on this weekend that we have spoken about going to. I haven't mentioned getting tickets, and you are about to order some. Before you do, you want to check and you say:	<b>You havnae/irna got ones, hint/ir'n you?</b>
<b>NNXRB3</b>	We are having a party on Saturday night. Our friend Jennifer is working a lot just now, and you are pretty sure she has a shift on Saturday. To double check this with me, you say:	<b>Jennifer cannae/canna come, kint/can'n she no?</b>
<b>NNXRB4</b>	A few of our friends are at your house. You are offering to make coffee. You are pretty sure I don't like coffee. You say:	<b>You don't/dunna drink coffee, dint/do'n you no?</b>
<b>NNXFB3</b>	We are discussing a friend of ours who was very drunk last weekend. We were trying to stop him doing something silly, but he did it anyway. You say:	<b>He just widnae/widna listen, wint/wid'n he no?</b>
<b>NNXFB4</b>	Our friend Tom is waiting to hear if he has been selected for the local football A team this season. Another friend, Sarah, asks if there's any news. Last time you heard, he was still waiting, so you say to me:	<b>He hasnae/isna heard yet, hint/is'n he no?</b>
<b>NNXRS3</b>	I am telling you about an argument I had with someone I work with. The person in question keeps changing their mind about what they want done, and says I do it wrong no matter what I do. You say:	<b>Wow. You just cannae/canna win, can you?</b>

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<b>NNXRS4</b>	One of our friends is disappointed that he wasn't picked for the local football team. However, you know that he rarely went to the practice sessions. You say to me:	<b>Well, he didnae/didna try very hard, did he?</b>
<b>NNXFS3</b>	I hate fish. You see a recipe for a fish stew on TV and you say to me:	<b>You widnae/widna like that, wid you?</b>
<b>NNXFS4</b>	We are talking about starting to go to a class at the pool together. You are not sure what the difficulty is like; as far as you know, I haven't been before, but to check this, you say:	<b>You havnae/irna been before, have/ir you?</b>
<b>NNZRT3</b>	We are organising a party. Our friend Joe has clicked "not attending" on the Facebook event; however, I mention something about Joe picking up some food on the way over. You say:	<b>Joe cannae/canna come, kint/can'n he?</b>
<b>NNZRT4</b>	We are talking about our friend Michael. You are pretty sure he doesn't drink, as you always see him with orange juice at parties. However, I start telling you a story about how he was complaining about a major hangover this weekend. You say:	<b>Michael doesnae/doesna drink, dint/does'n he?</b>
<b>NNZFT3</b>	You want to bring your dog to the park with us. Our friend Lucy doesn't like dogs, but you think because it's a big open space, the park it will be ok. When you say this, though, I raise an eyebrow. You say:	<b>It widnae/widna be a problem, wint/wid'n it?</b>
<b>NNZFT4</b>	I have been signed up to do a charity bungee jump but I am very scared about it! Our friend Michelle is very shy and reserved, but I tell you that "Michelle said it's not so bad once you get up there". You say:	<b>She hasnae/isna done it, hint/is'n she?</b>
<b>NNZRB3</b>	We are talking about one of our friends' children. I say that she must be turning three this year. You say:	<b>She cannae/canna be that old already, kint/can'n she no?</b>
<b>NNZRB4</b>	I have been trying to win a holiday by collecting the codes on the backs of crisp packets. You thought this was ridiculous all along. When the closing date passes, I tell you I am really disappointed. You say:	<b>You didnae/didna really think you'd win, dint/did'n you no?</b>
<b>NNZFB3</b>	I am telling me about one of our friends and how some of our other friends tried to play a trick on her. I say "it was really funny". You say:	<b>She widnae/widna have fell for that, wint/wid'n she no?</b>
<b>NNZFB4</b>	You have fallen out with one of our friends. You told me not to speak to him either. I say that I heard he is going on holiday soon. You say:	<b>You havenae/irna spoke to him, hint/ir'n you no?</b>
<b>NNZRS3</b>	You have set out one of those mouse deterrents that plays a really high sound. I come in and say "what's that noise?!". You say:	<b>You cannae/canna hear that, can you?</b>
<b>NNZRS4</b>	I tell you some gossip about a friend of ours. It seems very speculative. I then tell our other friend who arrives later in the evening. You say to me:	<b>We don't/dunna know this for sure, do we?</b>
<b>NNZFS3</b>	We have not seen one of our friends in a very long time. We have arranged to meet up with him one evening, but we've been waiting for ages. I say: "I bet forgotten". You say:	<b>He widnae/widna forget, wid he?</b>
<b>NNZFS4</b>	I hate scary movies. You want to go and see the new Saw film; when you mention this to me, I say "oh that was horrible". You say:	<b>You havena/irna seen it, have/ir you?</b>

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<b>QNXRT3</b>	Our friend Marie really likes action films. Last weekend we saw the new James Bond film, and thought it was action-packed. I say to you that I am thinking of inviting Marie to come with me to see the Bond film. You say:	<b>Wint/Wid'n she love it?</b>
<b>QNXRT4</b>	At some point in the past, our friend Sarah told us she had been to Edinburgh Castle. You are trying to work out whether it is worth going to visit. You ask me for advice, and I say "you should ask Sarah". You say:	<b>Hint/Is'n she been there before?</b>
<b>QNXFT3</b>	You are pretty sure that you have seen that I have a driving license. We agree to help one of our friends move house; we will rent a van to move some boxes. You say to me:	<b>Kint/Can'n you drive?</b>
<b>QNXFT4</b>	Our friend Robert doesn't eat meat, but he does eat fish. There is some haddock in the freezer. I am trying to work out what to cook when he comes round for dinner. You say:	<b>Dint/Does'n he eat fish?</b>
<b>QNXRB3</b>	You ordered a jumper but it's too big. You are thinking about giving it to one of our friends instead and you say:	<b>Wint/Wid'n she no like it?</b>
<b>QNXRB4</b>	You are pretty sure you have seen photos of me on Facebook where I am wearing glasses. You are going to get a new pair. You say to me:	<b>Hint/Ir'n you no got glasses?</b>
<b>QNXFB3</b>	We are arranging a party, and there are a few things we still need to get. A while before, we had arranged that I would get the glasses. You say:	<b>Kint/Can'n you no get the glasses?</b>
<b>QNXFB4</b>	I am talking about one of my old jobs. I have not worked there for a while, but you remember I seemed to like working there. You say:	<b>Dint/Did'n you no have a good time there?</b>
<b>QNXRS3</b>	I really like films with Angelina Jolie in them. A friend of ours is telling us about her most recent film they went to see the other day. When the friend leaves, you say to me:	<b>Would you no like that film?</b>
<b>QNXRS4</b>	I've been reading this series of books, and you see an advert for one on the TV. You want to check that it's the same series, so you say:	<b>Have you no been reading those books?</b>
<b>QNXFS3</b>	We have been invited to a party. The invitation says 8pm but from experience, you know that people don't usually turn up til nearer 9pm. You say:	<b>Can we no be a bit late?</b>
<b>QNXFS4</b>	The local charity 10k is coming up soon. You think I ran it last year. You are thinking about entering and are looking for some advice; you say:	<b>Did you no do that last year?</b>
<b>QNZRT3</b>	You say that you are thinking about getting a particular book for our friend Jamie for Christmas. I ask if you are sure about that. You say:	<b>Wint/Wid'n he like that?</b>
<b>QNZRT4</b>	We are going out for a coffee and need to choose where to go. You suggest a cafe down the road, but I pull a face. You say:	<b>Hint/Ir'n they got good cakes there?</b>
<b>QNZFT3</b>	We are going to a party. The invitation says 8pm, but you suggest turning up at 9pm. I say no, that we should be on time but you say to me:	<b>Kint/Can'n we be a little bit late?</b>

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<b>QNZFT4</b>	Last week on my Facebook you saw a post about going to see the newest James Bond film. You ask me about a character from the film, and I say “I don’t know”. You say:	<b>Dint/Did’n you see the film last week?</b>
<b>QNZRB3</b>	You think that our friend Mary really likes animals. You have just got some pet rats and you suggest that you will invite Mary to see them. I say “to see some rats?!” and you say:	<b>Wint/Wid’n she no like them?</b>
<b>QNZRB4</b>	You have seen photos of me on Facebook where I am wearing glasses. You are going to get a new pair and you ask where I got mine. I look blank. You say:	<b>Hint/Ir’n you no got glasses?</b>
<b>QNZFB3</b>	You have bought lots of ingredients to make us dinner tonight, something we planned a while ago. You mention this to me, and I looked shocked, like I have forgotten. You say:	<b>Kint/Can’n you no come?</b>
<b>QNZFB4</b>	It seems like everyone watches Game of Thrones. You start watching it, what feels like ages after everyone else. You start talking to me about an episode and I look confused. You say:	<b>Dint/Did’n you no watch it?</b>
<b>QNZRS3</b>	You are telling me that you are doing a sponsored bungee jump. I say I would be really scared and I couldn’t do it. You say:	<b>Would you no do it for charity?</b>
<b>QNZRS4</b>	You ask me to help you change the oil in your car. I agree. I am poking around under the bonnet, and I laugh and say that I don’t know what I’m doing. You say:	<b>Have you no done this before?</b>
<b>QNZFS3</b>	You need to get a ticket for the dance at the hall tonight. You tell me this and I say you can’t get them anymore. You say:	<b>Can you no usually get some on the door?</b>
<b>QNZFS4</b>	We are out for a drink, and you are getting a round at the bar, including a vodka and lemonade that you think I asked for. When you come back to the table, you tell me what you have got me. I say “lemonade?”. You say:	<b>Did you no ask for lemonade?</b>
<b>RQRT3</b>	I tell you I really want to go to a party this Friday night. On Friday, you call me to see what time I am heading over. However, I say that I am still at work and I am going to have to stay late to this finish this project. You say:	<b>But you were so excited! Wint/Wid’n you rather go to the party and finish the work tomorrow?!</b>
<b>RQRT4</b>	I have told you that I got a new watch for my birthday. I am wearing it today. However, I start eyeing up watches while we are out shopping and saying that I want them. You say:	<b>Hint/Ir’n you just got a new watch?!</b>
<b>RQFT3</b>	We are trying to go on holiday together. I have booked holidays at work so I am definitely free. You were there when I booked them. However, I seem reluctant to actually buy the tickets, saying I am not sure if I will have time. You say:	<b>Dint/Did’n you book the time off already?! What’s the problem?</b>
<b>RQFT4</b>	You know I am able to drive. I give you lifts regularly. I say I am worried about driving in the snow; however, you say to me:	<b>Kint/Can’n you drive? You’ll be fine.</b>
<b>RQRB3</b>	You are offering around biscuits with a cup of tea. I have told you that I am hungry and you know I like sweet things. You say:	<b>Wint/Wid’n you no like a biscuit?</b>



**SESSION 2**

<b>RQRB4</b>	I have won the egg and spoon race at the local fair for the last few years. At the race this year, I am looking nervous. You say:	<b>Don't look so worried! Hint/Ir'n you no won it the past few years?!</b>
<b>RQFB3</b>	I don't drink coffee but I love tea. You know this. We are at a wedding and they are serving coffee after dinner. I look disappointed and turn down the coffee. You say:	<b>Dint/Do'n you no drink tea? I'm sure they'll bring that in a minute.</b>
<b>RQFB4</b>	We really want to get tickets to this concert. The tickets go on sale on Friday; you are working, but I am not, so I am able to go up and queue in the morning. I am stressing about not getting them. You say:	<b>Kint/Can'n you no go up early? So it'll be fine.</b>
<b>RQRS3</b>	You have recently told me a really good story about somebody we know. You tell me not to tell anyone. Another one of our friends has been asking me to tell him what the news is, but I haven't told him. When I tell you this, you say:	<b>Would he no like to know?!</b>
<b>RQRS4</b>	We are getting ready for a wedding. You are already ready, I come through to the kitchen looking very smart and pleased with myself. You say:	<b>Have you no scrubbed up well?!</b>
<b>RQFS3</b>	I have been very worried about a piece of work I have had to do recently. You have been reassuring me throughout. I have just got some really good feedback on it, and when I tell you, you say:	<b>See? Did I no say you would do well?</b>
<b>RQFS4</b>	I have made us both dinner; I made a curry. You get stuck in; it tastes pretty good and you say:	<b>Can you no make a good curry?!</b>
<b>IT3</b>	We are going to get tickets for a film tonight. I ask if I should get a ticket for your friend Sarah. You say:	<b>Dint/Do'n bother, she's not sure if she can come yet.</b>
<b>IT4</b>	You have invited me as your guest to an important event. I am joking with you and I say I might turn up late. You say:	<b>Dint/Do'n even think about it!</b>
<b>IS3</b>	We are going on holiday and you tell me I need to be at the airport by 3pm. You say:	<b>Don't/Dunna be late!</b>
<b>IS4</b>	We get in your car. You say:	<b>Don't/Dunna open your window; it won't shut again.</b>
<b>UG13</b>	We are making a playlist for a party. You want to check if we can put a certain song on it, so you say:	<b>This song cannae we put on it?</b>
<b>UG14</b>	I am coming over for dinner. You phone me up and say:	<b>Stirfry don't you like?</b>
<b>UG15</b>	We are getting ready for a wedding. I appear in the kitchen, ready to go. You say:	<b>What not a quick change that was!</b>
<b>UG16</b>	We have just come out from seeing a really boring film. You say:	<b>How not a good film was that!</b>
<b>UG17</b>	I want to try out the new restaurant down the road. I ask you if it's good, but you say:	<b>I not have been yet.</b>
<b>UG18</b>	I ask you if you would like a cup of coffee. You say:	<b>No, thanks, I not would like coffee.</b>
<b>UG19</b>	You are going to the shop. I ask you if you can get me something and you say:	<b>What do want you?</b>
<b>UG20</b>	We are talking about Usain Bolt and how fast he is. You say:	<b>Who can him beat?!</b>
<b>UG21</b>	I have just arrived at your house and I'm really hungry. There's some fresh scones sitting out, and I'm eyeing them up, but you say:	<b>Do no touch them! They're for later.</b>

**SESSION 2**

<b>UG22</b>	Recently, you have done me a really big favour, and I'm really grateful. I want to get you something in return, but when I ask what you would like, you say:	<b>Do not get me anything! It's not a problem.</b>
<b>UG23</b>	We are at a wedding, and the bride comes in. You say to me:	<b>What a beautiful dress!</b>
<b>UG24</b>	I am telling you about my holiday. I did loads of things outdoors and seem to have had a good time. You say:	<b>How fun!</b>
<b>FQ7</b>	You have just heard a really good story about someone you know. You want to tell me the story, but you're not sure if I know the person in question, so you say:	<b>Do you know Sarah?</b>
<b>FQ8</b>	You are tasked with organising a Christmas party. You need to get some volunteers to help out, so you say:	<b>Can you help out?</b>
<b>FQ9</b>	I have been emailing to try and make a dentist appointment but I haven't heard anything back. You say:	<b>Have you tried phoning them?</b>
<b>FQ10</b>	I am very stressed about organising a big community event. You say:	<b>Would I be able to help with anything?</b>
<b>FDQ5</b>	We are running a charity 10k. You finish the race and you look around, surprised. You seem to be the first to finish. You say to me:	<b>I won?!</b>
<b>FDQ6</b>	There's a big bag of crisps on the table at my house. I say they are for sharing, but there aren't that many left, and while you are out I finish them. When you come back, you say:	<b>You ate all the crisps?</b>
<b>FDQ7</b>	You have come to me because your boss has asked you to work more hours this week, but you are meant to be going on holiday. I say that your holiday is important and you say:	<b>So you widnae/widna do it?</b>
<b>FDQ8</b>	One of my friends left her iPod at my house weeks ago. I am telling you this and you say:	<b>She hasnae/isna come back to get it?</b>
<b>FWHS5</b>	We are organising a charity walk and we need to find a couple of people to help out at the finish line. You say:	<b>Who can we ask?</b>
<b>FWHS6</b>	We are going to a fancy dress party and you are trying to decide between two costumes. You say to me:	<b>Which one would be funniest?</b>
<b>FWHS7</b>	You are thinking about taking a language class but you are not sure. You know some of our friends did it before, but you are not sure which one, so you say to me and a group of our friends:	<b>Who's done it before?</b>
<b>FWHS8</b>	You are moving house and you need some help to lift some boxes. You say to me and a group of our friends:	<b>Who's free this weekend?</b>
<b>FWHO5</b>	We are watching X Factor. One of the judges has to choose someone to send home. You nip to the kitchen to get a glass of water, but when you come back, the decision has been made. You say:	<b>Who did she send home?</b>
<b>FWHO6</b>	It is a public holiday and it ends up being a really lovely sunny day. We had spoken about going on a trip if that happened, so you phone me up and say:	<b>Where can we go today?</b>

SESSION 2

<b>FWHO7</b>	We are going to get a takeaway with some friends later, but we won't be ordering til later and we are not sure where from. I have to go out, and will only be back for the food, so you say:	<b>What would you want from the Chinese?</b>
<b>FWHO8</b>	We are watching the X Factor final. I say I have just texted to vote for my favourite act. You say:	<b>Who have you voted for?</b>
<b>FNC5</b>	I need to get a last minute birthday card, and I ask you if you think I can get one in the local shop. You say:	<b>Oh no, they don't/dunna have nothing like that.</b>
<b>FNC6</b>	You went out to a cafe the other day, and had an amazing chocolate cake. I ask you what it was like, and you say:	<b>You cannae/canna imagine nothing like it, it was so good.</b>
<b>FNC7</b>	You play in a local football league. I am asking you how you are doing this season, and you say:	<b>We havnae/irna got nae points yet.</b>
<b>FNC8</b>	We are arranging a barbecue because it's a really sunny day. Our friend Jill is coming; she is really afraid of dogs. I want to bring my dog, but you say:	<b>Jill widnae/widna want nae duggs there.</b>
<b>FDN3</b>	We are trying to do a crossword. I manage to work out a really hard clue; you say:	<b>Oh yeah! I'd no have thought of that.</b>
<b>FDN4</b>	I tell you about a friend of mine who has signed up to do a marathon recently, but doesn't have much time to do any proper training. You say:	<b>He's no really thought this through.</b>
<b>FA3</b>	We have both been invited to a special cinema screening for the latest Harry Potter film, but it's at midnight. You say:	<b>I amnae/amna going to go.</b>
<b>FA4</b>	In a big group, we are organising who is going to be sharing taxis back from a wedding. You say to me:	<b>I'm coming with you, amnae/am'n I?</b>
<b>FEM3</b>	We are around at a friend's house, and he has some Ikea bookshelves. They seem a bit squint though, and you say:	<b>He mustnae/mustna have read the instructions properly.</b>
<b>FEM4</b>	We are going to stay in a cottage up north for a few days. We have never been there before, and we have followed the directions down the only path we could see but still have not found the house. You say:	<b>I mean, we must be going the right way, mustnae/mustna we?</b>
<b>FH3</b>	We are going to get a bus in to town together. However, you say:	<b>I havnae/havna any change for the bus.</b>
<b>FH4</b>	We are sitting outside a pub with one of our friends and it starts raining. Immediately, he heads inside, while we put our hoods up. I ask why he left so suddenly and you say:	<b>He hasnae/havna a hood on his jacket.</b>
<b>FN3</b>	We have already bought a lot of beer for this party, but I ask if I should get more. You say:	<b>You neednae/needna bother, we have loads already.</b>
<b>FN4</b>	I am looking to buy some mouse traps; I say to you that I am going to go to the local shop. You say:	<b>You neednae/needna go there, they were out last time I went.</b>
<b>FM3</b>	You have invited our friend Liz to come round and see us tonight, but she wasn't sure if she would be free. You say to me:	<b>She michtnae/michtna be able to come.</b>
<b>FM4</b>	It's a beautiful day and I say that I really want an ice cream, and that we should go to the shop to get some. You say:	<b>They michtnae/michtna have any left!</b>
<b>FNVR3</b>	You were cycling and you fell off your bike. You tell me this and I look shocked. You say:	<b>Don't worry, I never got hurt.</b>
<b>FNVR4</b>	I think I saw you in town this afternoon, but when I ask you about it later, you say:	<b>I never went to town today.</b>

**SESSION 2**

<b>FWHE3</b>	We are going to go out for dinner, when I find out that there is a takeaway deal where you can dinner for two for £10. You say:	<b>What a good deal!</b>
<b>FWHE4</b>	I am telling you about a complicated problem that I need to deal with at work. You say:	<b>What a difficult situation!</b>
<b>FMAN3</b>	I am heating up some soup for our lunch and I accidentally bump my arm on the side of the pan. I say “ow” and you say:	<b>Mind and no burn yourself!</b>
<b>FMAN4</b>	Tomorrow morning we have to get up very early to go to the airport. I speak to you the night before to organise a lift and when I go and hang up you say:	<b>See and no sleep in tomorrow!</b>
<b>FMNA3</b>	We are walking through a field and there are lots of rabbit holes every where. You say to me:	<b>Watch no and put your foot in them!</b>
<b>FMNA4</b>	We are going to a wedding, and I am joking that I am going to wear a giant neon hat. You say:	<b>Away no and be daft!</b>
<b>FDMA3</b>	We are going to a wedding; I was late for the last one we went to. You say:	<b>Don’t see and be late this time!</b>
<b>FDMA4</b>	You did something embarrassing recently and I am pestering you to repeat the story. You say:	<b>Oh don’t away and be daft!</b>
<b>FGN5</b>	We are meeting at the station to catch a train. You say:	<b>Gonnae no be late!</b>
<b>FGN6</b>	I am borrowing a DVD from you; it’s your favourite and you want to make sure I keep hold of it so you say:	<b>Gonnae no lose it!</b>
<b>FGN7</b>	You are trying to sleep on the bus we are on, but I keep waking you up to show you things. Eventually, you say:	<b>Gonnae you no dae that!</b>
<b>FGN8</b>	You are trying to get to sleep, but there are a group of people being really loud outside the window. The next day, you see one of them and you say:	<b>Gonnae you no be so loud!</b>
<b>FRNZR3</b>	Our friend Marie is meant to be coming to a concert with us, but then you see that she is attending a different event at the same time on Facebook. You say to me:	<b>Marie can come to the concert, right?</b>
<b>FRNZR4</b>	You see there’s a programme about fishing on the TV tonight, and you say you are going to tell our friend Matt about it. I say “why are you going to tell him?” and you say:	<b>He does fishing, right?</b>
<b>FRNXR3</b>	I am telling you a story about one of our friends who had eaten something really spicy the other night and didn’t seem fussed. You have witnessed this before, and you say:	<b>I mean, she would eat anything, right?</b>
<b>FRNXR4</b>	We are discussing what pets we have had in our lives. You are pretty sure I have a dog, so you say:	<b>You’ve got a dog just now, right?</b>
<b>FRNZF4</b>	You are pretty sure I drink coffee. I come round to yours, and you ask if I want a coffee. I say “ugh, no”. You say:	<b>You drink coffee, right?</b>
<b>FRNXF3</b>	I have just been to see the latest James Bond film. You really like action films. I’m not such a fan, but I say that this one was really good. You say:	<b>So I would like it, right?</b>
<b>FRNXF4</b>	I start recommending that we get a takeaway from the Chinese up the road, instead of our usual. Although we have a different usual, we have been to this one before, and you decide to confirm this. You say:	<b>We’ve had one from there before, right?</b>

SESSION 2

<b>FRTF3</b>	We are trying to decide which day to meet up, but we're both very busy right now. I say I am free on Wednesday, but you are not sure if you will be. You say you will get back to me. When you do, you say:	<b>So, you can meet on Wednesday, kint/can'n you, right?</b>
<b>FRTF4</b>	I am collecting football stickers for the World Cup. You know I don't have many left to collect; in fact, you're pretty sure it's only two. You say to me:	<b>You only need two more, dint/do'n you right?</b>
<b>FRTR3</b>	Our friend Jill hates heights. I am telling you that I recently went up a really high tower. You say:	<b>Jill would have hated that, wint/wid'n she right?</b>
<b>FRTR4</b>	I am telling you that I went to visit Edinburgh Zoo recently. You are really interested in pandas, and you say:	<b>They've got pandas, hint/ir'n they right?</b>
<b>FNITWH3</b>	We are looking after our friend's daughter for the afternoon. She is able to reach things and she starts reaching towards the hot cup of tea on the table. You say:	<b>You don't/dunna touch that!</b>
<b>FNITWH4</b>	I quit smoking a little while ago, and I am doing well. I find it hard when I go to the pub though. I am going out to the pub tonight, and you say:	<b>You don't/dunna smoke tonight!</b>
<b>FNITWL3</b>	I am going out for some drinks, but we have to be up early to catch the train tomorrow morning. Before I head out, you say:	<b>Don't/Dunna you have too many!</b>
<b>FNITWL4</b>	I have just had a birthday, and I had a few people around for drinks. There's a bit of mess and washing up to be done. When I start doing it, you say:	<b>Don't/dunna you worry about that! I'll do it.</b>
<b>FNIQH3</b>	You have a spare ticket to a show this weekend, and you send a message around some of our friend to ask if anyone wants to come. You get loads of responses from people saying that that would be great, and they will just meet you there. You say:	<b>Evdy don't/dunna show up!</b>
<b>FNIQH4</b>	A few of us have organised a surprise party. At the last minute, you realise we have forgotten to get a cake. You mention this and three people go to put their shoes on to go out and get one. You say:	<b>Evdy don't/dunna get their shoes!</b>
<b>FNIQL3</b>	Five of us are ordering a takeaway. I am reading out the order list and I say "five portions of rice". You say:	<b>Don't/Dunna evdy order rice! We can share.</b>
<b>FNIQL4</b>	We are round at your house and someone says that they need to get going. Everyone starts agreeing and getting their jackets. You say:	<b>Aw, don't/dunna evdy get their coats!</b>
<b>FNITRH3</b>	We are looking after our friend's children for the afternoon, and they are misbehaving, jumping up and down on their beds. You say:	<b>James don't/dunna jump on his bed and Natalie don't/dunna jump on hers!</b>
<b>FNITRH4</b>	You are helping out at a friend's show. They aren't quite ready for people in the hall, so you say:	<b>Folk with tickets don't take their seats just yet.</b>
<b>FNITRL3</b>	You are telling a group of our friends that they have to be on time to catch the ferry. The boys are notorious for never being on time, so you say:	<b>Don't/dunna the boys be late!</b>
<b>FNITRL4</b>	You are arranging some people for a group photo. You say:	<b>Don't/dunna small people stand at the back!</b>





## Consent for Participation in Experiments, Data Use, and Data Storage

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<b>Study title:</b>	PhD research
<b>Principal Investigator:</b>	Professor Caroline Heycock
<b>Researcher collecting current data:</b>	E Jamieson

**What is this document?** This document explains what kind of study we're doing, what your rights are, and what will be done with your data. If there are any special benefits or risks, they will be explained here. By filling in, signing and dating this document, you will be agreeing to participate and to let us use your data in specific ways. Please read the information below, then turn to the next page, tick all boxes that apply, and, if you are happy to proceed, sign and date where indicated at the end of the form.

**Nature of the study.** You are about to participate in a study which involves giving judgments on a series of sentences. The researcher named above will first introduce a small context, and then you will press a button on a laptop to hear an example. You will then give a rating to the example you have heard, and may discuss it with the researcher. This discussion will be recorded. There will be two sessions with a short break in the middle; in total, the study should take up to 2 ½ hours. You will be given full instructions shortly and will be able to ask any questions you may have.

You will be given a £15 Amazon voucher as a thank you for your participation in this research.

**Risks and benefits.** There are no known risks to participation in this study. The only benefits to you personally are those you draw from making a contribution to our knowledge about language and its use.

**Confidentiality.** The data we collect will not be associated with your name or with any other personal details that might identify you.

**Voluntary participation and right to withdraw.** Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you withdraw from the study during or after data gathering, you can also request that your data is deleted. There is no penalty for withdrawal.

**Contact information.** This research is being conducted by the above-listed researchers at the University of Edinburgh. The researchers can be contacted at [e.jamieson@sms.ed.ac.uk](mailto:e.jamieson@sms.ed.ac.uk) or [caroline.heycock@ed.ac.uk](mailto:caroline.heycock@ed.ac.uk) for questions or to report a research-related problem. Contact the Linguistics & English Language Ethics committee at 0131 651 5510 or [lcl.ethics@ed.ac.uk](mailto:lcl.ethics@ed.ac.uk) if you have concerns regarding your rights as a participant in the research.

If you have any questions about what you've just read, please feel free to ask them now.

Thank you for your help!

Now please complete the consent form on the next page.



Consent for Participation, Use of Data, and Data Storage

<b>Study title:</b>	PhD research
<b>Principal Investigator:</b>	Professor Caroline Heycock
<b>Researcher collecting current data:</b>	E Jamieson

PLEASE MARK EITHER 'YES' OR 'NO' FOR EVERY STATEMENT BELOW:

<b><u>Consent for participation:</u></b>	<b>Yes</b>	<b>No</b>
I consent to having my responses and speech recorded for the specific research project identified above. I have been given the opportunity to ask questions.	<input type="checkbox"/>	<input type="checkbox"/>
I understand that I have the right to terminate this session at any point, and to request that my data is deleted.	<input type="checkbox"/>	<input type="checkbox"/>
<b><u>Anonymity/identification:</u></b>	<b>Yes</b>	<b>No</b>
I agree that my name and personal details will not be made public under any circumstances.	<input type="checkbox"/>	<input type="checkbox"/>
<b><u>Researcher use of judgment data:</u></b>	<b>Yes</b>	<b>No</b>
I agree that the anonymized data I produce may be <b>kept permanently in Edinburgh University archives</b> and used <b>for the specific research project</b> which made them.	<input type="checkbox"/>	<input type="checkbox"/>
I agree that the anonymized data I produce <b>may be used by the above-named researchers, as well as by other qualified researchers, for teaching or research purposes, and in professional presentations and publications.</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b><u>Researcher use of voice recordings:</u></b>	<b>Yes</b>	<b>No</b>
I agree that the recordings made may be <b>kept permanently in Edinburgh University archives</b> and used <b>for the specific research project</b> which made them.	<input type="checkbox"/>	<input type="checkbox"/>
I agree that the recordings made <b>may be used by the above-named researchers, as well as by other qualified researchers, for teaching or research purposes, and in professional presentations and publications.</b> In the case of voice recordings, I understand that <b>my voice might be recognizable to those who know me.</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b><u>General public use of judgment data:</u></b>	<b>Yes</b>	<b>No</b>
I agree that the anonymized data I produce <b>may be made publicly available for general use</b> , e.g. used in radio or television broadcasts, or put on the world-wide web.	<input type="checkbox"/>	<input type="checkbox"/>
<b><u>General public use of voice recordings:</u></b>	<b>Yes</b>	<b>No</b>
I agree that these recordings <b>may be made publicly available for general use</b> , e.g. used in radio or television broadcasts, or put on the world-wide web. In the case of voice recordings, I understand that <b>my voice might be recognizable to those who know me.</b>	<input type="checkbox"/>	<input type="checkbox"/>

Name: \_\_\_\_\_ Email: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: /d /m /y \_\_\_\_\_



**BACKGROUND INFORMATION**

Name: \_\_\_\_\_

Age: \_\_\_\_\_ D.O.B.: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Gender: \_\_\_\_\_

We may want to contact you at a future date to ask if you would be interested in participating in a follow-up. If you are willing to be contacted in this way, please provide your email address. We will use it for no other purpose and it will not be shared with any other person or organisation.

Email address: \_\_\_\_\_

\*\*

What area of [Shetland/Glasgow] did you grow up in?

\_\_\_\_\_

Have you ever lived anywhere outside of [Shetland/Glasgow]? Y / N

If yes, where did you live, and how long for?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Parents' places of birth: \_\_\_\_\_ and \_\_\_\_\_

What is your occupation? \_\_\_\_\_

## Post-Interview

Thank you for taking part in this research!

My project is entitled “Questions, biases and ‘negation’: Evidence from Scots varieties” and looks at the different ways that people use types of questions in different Scottish dialects – specifically, in Shetland and in Glasgow.

I am looking at questions that seem to have some sort of negative marker in them (like the *n’t* in *don’t*), but that don’t actually mean anything negative. This includes

- tag questions (where *you know Sarah, don’t you?* implies that you do know Sarah)
- biased questions (where *don’t you know Sarah too?* again implies that you do know Sarah)
- rhetorical questions (things like *didn’t I tell you it would be easy?!*, which implies both that I told you it would be easy, and that it was easy)
- exclamatives (things like *isn’t it a lovely day!*, which implies that it is a lovely day)

In Shetland and Glasgow, I am interested to find out what sorts of negative markers people use in these types of sentences, and how they are different to the negative markers they use when they actually want to say something negative. I am also interested in the ways that intonation, particularly getting higher at the end of a sentence, works in these types of sentences.

I hope that this research will also be able to contribute to wider discussion about these types of questions across languages.

If you would like to know more, please email me (E Jamieson): [e.jamieson@sms.ed.ac.uk](mailto:e.jamieson@sms.ed.ac.uk).

I am supervised by Professor Caroline Heycock, who can be contacted at [caroline.heycock@ed.ac.uk](mailto:caroline.heycock@ed.ac.uk).

Thanks again!

# Appendix B

This appendix includes the materials and consent forms for the experiments on biased questions and tag questions presented in chapter 5.

- i) English experiment consent form
- ii) English materials
- iii) German experiment consent form
- iv) German materials



Consent for Participation in Experiments, Data Use, and Data Storage

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<b>Study title:</b>	PhD research
<b>Principal Investigator:</b>	Professor Caroline Heycock
<b>Researcher collecting current data:</b>	E Jamieson

**Nature of the study.** You are about to participate in a study which involves reading a set of short (1-2 line) contexts, and then choosing one of two possible sentences in response to each context. Your responses will be recorded. Your session should last for around 15 minutes. You will be given full instructions shortly.

**Risks and benefits.** There are no known risks to participation in this study. The only benefits to you personally are those you draw from making a contribution to our knowledge about language and its use.

**Confidentiality.** The data we collect will not be associated with your name or with any other personal details that might identify you.

**Voluntary participation and right to withdraw.** Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you choose to withdraw afterwards, please use the contact information below, we will delete your data and there will be no penalty or loss of benefits to which you are otherwise entitled.

**Contact information.** This research is being conducted by the above-listed researchers at the University of Edinburgh. The researchers can be contacted at e.jamieson@sms.ed.ac.uk or caroline.heycock@ed.ac.uk for questions or to report a research-related problem. Contact the Linguistics & English Language Ethics committee at 0131 651 5510 or lel.ethics@ed.ac.uk if you have concerns regarding your rights as a participant in the research.

If you have any questions about what you've just read, please contact the researchers before continuing.

Thank you for your help!

By clicking accept, you consent to the following:

1. I agree that the anonymized data I produce may be **kept permanently in Edinburgh University archives** and used **for the specific research project** which made them.
2. I agree that the anonymized data I produce **may be used by the above-named researchers, as well as by other qualified researchers, for teaching or research purposes, and in professional presentations and publications.**
3. I agree that that the anonymized data I produce **may be made publicly available for general use**, e.g. used in radio or television broadcasts, or put on the world-wide web.
4. I understand that I have the **right to terminate this session** at any point. If I choose to **withdraw after completing the study**, my data will be deleted at that time.

## Experiment materials

### p/neutral

1. PNX1 We are talking about a friend of ours who recently moved away. You are pretty sure she went to Berlin. You say:
  - Didn't she move to Berlin?
  - She moved to Berlin, didn't she?
2. PNX2 We are trying to decide what food to order. You are pretty sure that I was out for a curry last night, and you want to make sure I don't have the same thing twice. You say:
  - Didn't you have a curry last night?
  - You had a curry last night, didn't you?
3. PNX3 You want to go and see the new Harry Potter film. A group of our friends went last week, and you're pretty sure I went with them. You want to find out what I thought of it, so you say:
  - Haven't you seen it?
  - You've seen it, haven't you?
4. PNX4 We are speaking about tattoos. You are pretty sure I have one, and you say:
  - Haven't you got a tattoo?
  - You've got a tattoo, haven't you?
5. PNX5 We are meeting up with a friend to catch a train. He calls to say he is still 10 minutes away. You are pretty sure the last train leaves in 5 minutes. You say:
  - Isn't he going to miss the train?
  - He's going to miss the train, isn't he?
6. PNX6 A friend of ours has just said she is going to pick up her new pet. You are pretty sure it is a dog, and you say:
  - Isn't she getting a dog?
  - She's getting a dog, isn't she?
7. PNX7 You are coming to a barbecue in my garden. You are pretty sure I like dogs, and you say:
  - Can't I bring my dog?
  - I can bring my dog, can't I?
8. PNX8 We are going to a concert. You haven't got a ticket yet, but you are pretty sure you can get one at the venue, so you say:
  - Can't you buy a ticket on the door?

- You can buy a ticket on the door, can't you?
9. PN9 You have bought our friend a birthday present. It is a book that you are pretty sure he will like. You say:
- Won't he like this?
  - He'll like this, won't he?
10. PN10 You are buying a bottle of wine for a party we are going to. You are pretty sure I will have some too, and you say:
- Won't you have a glass?
  - You'll have a glass, won't you?

**p/negative**

1. PNZ1 You think I won the marathon at the weekend. However, I start telling you that I am disappointed with my performance. You say:
- Didn't you win the race?
  - You won the race, didn't you?
2. PNZ2 You think our friend has a pet cat. However, I tell you that I never see her out walking her dog. You say:
- Doesn't she have a cat?
  - She has a cat, doesn't she?
3. PNZ3 You think I went to see the latest Harry Potter film recently. However, when you ask me what I thought about one of the scenes, I look totally blank. You say:
- Haven't you seen it?
  - You've seen it, haven't you?
4. PNZ4 You think our friend is in a relationship. However, I tell you that she said she was going on a date last night. You say:
- Hasn't she got a boyfriend?
  - She's got a boyfriend, hasn't she?
5. PNZ5 You think our friend is going to be meeting a group of us at this restaurant. However, when you arrive, I say we should just order. You say:
- Isn't he coming?
  - He's coming, isn't he?
6. PNZ6 I am giving an important presentation this year. You think it is a long time away. However, I tell you that I am feeling extremely nervous about it. You say:
- Isn't it a few months away?
  - It's a few months away, isn't it?

7. PNZ7 You think that it will be ok to make our friend fish for dinner. However, I say she is a vegetarian. You say:
  - Can't she eat fish?
  - She can eat fish, can't she?
  
8. PNZ8 You think it will be ok if you are a bit late to meet me in a café. However, I am annoyed. You say:
  - Can't you just read a book or something?
  - You can just read a book or something, can't you?
  
9. PNZ9 You think I would like a really spicy dinner you have made. However, I'm pushing it around my plate and looking unhappy. You say:
  - Won't you try it?
  - You'll try it, won't you?
  
10. PNZ10 Our friend is coming over, and it's raining. You don't think any more of this, but then I say "he's going to get soaked". You say:
  - Won't he have an umbrella?
  - He'll have an umbrella, won't he?

## Filler

### ø/negative

1. ONZ1 We are about to leave work. Sometimes you give me a lift, but today, I grab a bicycle helmet from under my desk. You say:
  - Do you not need a lift today?
  - Don't you need a lift today?
  
2. ONZ2 We are talking about a sold out concert that is coming up. I say that I am not going. You say:
  - Did you not get a ticket?
  - Didn't you get a ticket?
  
3. ONZ3 We are talking about baths. I say I haven't had one in years. You say:
  - Have you not got a bath in your flat?
  - Haven't you got a bath in your flat?
  
4. ONZ4 You are passing around bits of cake. I ask if I can have one. You say:
  - Oh, have you not had a slice yet?
  - Oh, haven't you had a slice yet?

5. ONZ5 You tell me you want to bring your dog to the park for a picnic. However, I say that my cousin is coming, so maybe you shouldn't. You say:
  - Is he not a dog person?
  - Isn't he a dog person?
6. ONZ6 You suggest going to the café around the corner. I say "wait, the bar?". You say:
  - Is it not a café anymore?
  - Isn't it a café anymore?
7. QNZ7 I tell you that I'm going to get a new phone because mine has totally stopped work. You say:
  - Can it not even send a text?
  - Can't it even send a text?
8. QNZ8 You tell me that you can't sing at all. I laugh and nod understandingly. You say:
  - Can you not sing either?
  - Can't you sing either?
9. ONZ9 I tell you about our friend, who is finishing up at one job and moving straight on to the next one. You say:
  - Will she not have a holiday first?
  - Won't she have a holiday first?
10. ONZ10 I tell you that I am working a 12 hour shift this weekend at a big event. The boss has said to prepare for a really busy shift, and to eat a lot before. You say:
  - Will you not get a break at all?
  - Won't you get a break at all?

**-p/neutral**

1. NNX1 We are talking about spiders. You are pretty sure I don't like them, so you say:
  - You don't like spiders, do you?
  - Do you not like spiders?
2. NNX2 We are leaving work. You are pretty sure I have my car with me today, so you say:
  - You don't need a lift today, do you?
  - Do you not need a lift today?



3. NNX3 We compete in a local football league. I am talking to you about one of the teams. You are pretty sure they haven't won any games this season, so you say:
  - They haven't won a game, have they?
  - Have they not won a game?
4. NNX4 We are talking about a friend of ours who was looking for a flat. You are pretty sure she is still looking, so you say:
  - She hasn't found a flat yet, has she?
  - Has she not found a flat yet?
5. NNX5 You are hosting a party at your house. You are pretty sure that our football team aren't be able to come. I have seen them today. You say:
  - They aren't coming tonight, are they?
  - Are they not coming tonight?
6. NNX6 Sometimes, there are free concerts on in the local park. There is a concert on this weekend, but you think there is a charge for the tickets. You say:
  - It isn't a free concert this weekend, is it?
  - Is it not a free concert this weekend?
7. NNX7 We are making dinner for one of our friends. You are pretty sure he is allergic to nuts, and you say:
  - He can't eat nuts, can he?
  - Can he not eat nuts?
8. NNX8 You need someone to play piano at a concert tonight. You are pretty sure I don't play, but there isn't much time left, so you say:
  - You can't play a piano, can you?
  - Can you not play a piano?
9. NNX9 You are pretty sure I don't like olives. You are offering some around, and you say:
  - You won't try an olive, will you?
  - Will you not try an olive?
10. NNX10 You want to tell me about something that happened in Game of Thrones last night. You don't want to spoil it for me, but you are pretty sure I don't watch it, so you say:
  - You won't watch it, will you?
  - Will you not watch it?

**-p/positive**

1. NNZ1 You thought the film we saw last night was absolutely awful. However, I start talking about my favourite scenes, and laughing. You say:
  - You didn't like the film, did you?!
  - Did you *like* the film!?
2. NNZ2 As far as you know, I hate coffee. You are making coffees for a few of our friends, and I say "wait, what about me?". You say:
  - You don't want a coffee, do you?!
  - Do you want *a coffee*?!
3. NNZ3 You know that our friend loves dogs, but she is very allergic to them. However, I say that I saw her out walking a dog the other day. You say:
  - She hasn't got a dog, has she?!
  - Has she got *a dog*?!
4. NNZ4 Your friend's birthday is coming up soon, and you gave him a card. You told him not to open it until his birthday. However, I say that I saw him, and that he said he was really grateful for the card. You say:
  - He hasn't opened it already, has he?
  - Has he opened it *already*?!
5. NNZ5 You are having a birthday party. You are pretty sure our friend isn't going to be able to make it. However, I say she is going to be bringing cakes to the party. You say:
  - She isn't coming, is she?!
  - Is she coming?!
6. NNZ6 You are pretty sure that two of our friends are just good friends. However, I say that I saw them holding hands the other day. You say:
  - They aren't a couple, are they?!
  - Are they a couple?!
7. NNZ7 We are on holiday in Paris and we need to ask for directions. You are pretty sure I don't speak French; however, I volunteer to do it. You say:
  - You can't speak French, can you?!
  - Can you speak French?!
8. NNZ8 We are going out to a smart event. You are pretty sure it is black tie. However, I say I am going to wear a t-shirt. You say:
  - You can't wear a t-shirt, can you?!
  - Can you wear a t-shirt?!

9. NNZ9 We are cooking some food. You are pretty sure it only takes 10 minutes. However, I have set the timer for 20 minutes. You say:

- It won't take 20 minutes, will it?!
- Will it take 20 minutes?!

10. NNZ10 Someone we know has just come fourth in a marathon. You are pretty sure they only give prizes to the top three. However, I say he is attending the prize-giving. You say:

- He won't get a prize, will he?!
- Will he get a prize?!



## Einverständniserklärung zur Teilnahme am Experiment, Nutzung und Speicherung der Daten

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<b>Name der Studie:</b>	PhD Umfrage
<b>Doktormutter/Hauptuntersuchungsleiterin:</b>	Professor Caroline Heycock
<b>Die Daten erhebende Doktorandin:</b>	E Jamieson

**Art der Studie.** Die folgende Umfrage besteht aus einer Folge kurzer Kontexte und zwei alternativer Antwortmöglichkeiten, von denen Sie geben werden eine auszuwählen. Ihre Auswahl wird gespeichert. Die Umfrage dauert etwa 15 Minuten. Der genaue Ablauf wird vor dem Start erklärt.

**Risiken und Nutzen.** Es sind keine Risiken oder Gefahren der Studie bekannt. Der einzige Nutzen, den Sie persönlich an der Teilnahme haben, ist der Wissenschaft und unserem Wissen über Sprache und ihre Anwendung zu helfen.

**Vertraulichkeit.** Die gesammelten Daten werden nicht mit Ihrem Namen oder persönlichen Details durch die Sie identifiziert werden könnten in Verbindung gebracht.

**Freiwilligkeit der Teilnahme und Möglichkeit zum Abbruch.** Die Teilnahme an dieser Studie ist freiwillig und kann jederzeit unterbrochen oder beendet werden. Sollten Sie Ihre Teilnahme zurückziehen wollen, nutzen Sie bitte die unten stehende Kontaktadresse – wir werden Ihre Daten löschen.

**Kontakt.** Diese Umfrage wird von den oben genannten Forscherinnen an der University of Edinburgh durchgeführt. Sie sind unter [e.jamieson@sms.ed.ac.uk](mailto:e.jamieson@sms.ed.ac.uk) oder [caroline.heycock@ed.ac.uk](mailto:caroline.heycock@ed.ac.uk) erreichbar, falls Sie Fragen haben oder ein Problem mit der Umfrage melden möchten. Sollten Sie Fragen oder Bedenken zum Thema Datenschutz haben, kontaktieren Sie bitte den Linguistics & English Language Ethikrat unter +44 0131 651 5510 oder [lel.ethics@ed.ac.uk](mailto:lel.ethics@ed.ac.uk).

Wenn Sie Fragen zu den oben stehenden Informationen über die Studie haben, kontaktieren Sie bitte eines der Mitglieder des Forschungsteams bevor sie an der Studie teilnehmen.

Danke für Ihre Hilfe!

Wenn Sie auf “annehmen” klicken, stimmen Sie dem Folgenden zu:

1. Meine anonymisierten Daten dürfen **permanent im Archiv der University of Edinburgh aufbewahrt** und für dieses **Forschungsprojekt** genutzt werden.
2. Meine anonymisierten Daten dürfen von den oben genannten Forscherinnen und anderen qualifizierten Forschern für Forschung Lehre und in Fachvorträgen und Publikationen verwendet werden.
3. Meine anonymisierten Daten dürfen **für die allgemeine Nutzung öffentlich zur Verfügung gestellt werden**, das bedeutet sie können in Radio- oder Fernsehsendungen genutzt oder online verfügbar gemacht werden.
4. Ich bin mir bewusst, dass ich die **Teilnahme an der Studie jederzeit unterbrechen oder beenden kann**. Sollte ich meine **Teilnahme zurückziehen** wollen, werden meine Daten gelöscht.

## Experiment materials

### p/neutral

1. PNX1 Es geht um eine Freundin, die vor kurzem umgezogen ist. Du bist dir ziemlich sicher, dass sie jetzt in Berlin wohnt. Du sagst:
  - Ist sie nicht nach Berlin gezogen?
  - Sie ist doch nach Berlin gezogen, oder?
2. PNX2 Wir diskutieren, was wir zum Abendessen bestellen wollen. Du bist dir ziemlich sicher, dass ich gestern Curry hatte und willst nicht, dass ich das gleiche zwei Mal essen muss. Du sagst:
  - Hattest du gestern nicht Curry?
  - Du hattest gestern doch Curry, oder?
3. PNX3 Du willst den neuen Harry Potter gucken. Ein paar Leute waren letzte Woche, und du bist dir ziemlich sicher, dass ich dabei war. Du willst wissen, wie ich den Film fand. Du sagst:
  - Hast du ihn nicht gesehen?
  - Du hast ihn doch gesehen, oder?
4. PNX4 Wir reden über Tattoos. Du bist dir ziemlich sicher, dass ich eins habe, und sagst:
  - Hast du nicht ein Tattoo?
  - Du hast doch ein Tattoo, oder?
5. PNX5 Wir warten auf einen Freund, der den gleichen Zug nehmen will. Er ruft an und sagt, dass er noch zehn Minuten braucht. Du bist dir ziemlich sicher, dass der Zug in fünf Minuten abfährt. Du sagst:
  - Wird er nicht den Zug verpassen?
  - Er verpasst den Zug, oder?
6. PNX6 Ein Freund hat dir gerade erzählt, dass er heute sein neues Haustier abholt. Du bist dir ziemlich sicher, dass es ein Hund ist, und sagst:
  - Bekommt sie nicht einen Hund?
  - Sie bekommt doch einen Hund, oder?
7. PNX7 Du kommst zum Grillen zu mir. Du bist dir ziemlich sicher, dass ich Hunde mag, und sagst:
  - Kann ich nicht meinen Hund mitbringen?
  - Ich kann doch meinen Hund mitbringen, oder?
8. PNX8 Wir gehen in ein Konzert. Du hast noch kein Ticket, aber du bist dir ziemlich sicher, dass du an der Abendkasse noch eins bekommst wirst. Du sagst:

- Kann man nicht an der Abendkasse noch ein Ticket kaufen?
  - Man kann doch an der Abendkasse noch ein Ticket kaufen, oder?
9. PN9 Du hast einem Freund ein Geburtstagsgeschenk gekauft. Es ist ein Buch, und du bist dir ziemlich sicher, dass es ihm gefallen wird. Du sagst:
- Wird ihm das nicht gefallen?
  - Das wird ihm bestimmt gefallen, oder?
10. PN10 Du kaufst eine Flasche Wein für die Party, zu der wir gehen. Du bist dir ziemlich sicher, dass ich auch welchen trinke und sagst:
- Wirst du nicht auch Glas trinken?
  - Du trinkst doch auch ein Glas, oder?

### **p/negative**

1. PNZ1 Du glaubst, dass ich den Marathon letztes Wochenende gewonnen habe. Ich erzähle dir aber, wie unzufrieden ich mit meiner Leistung bin. Du sagst:
- Hast du nicht gewonnen?
  - Du hast doch gewonnen, oder?
2. PNZ2 Du glaubst, dass unsere Freundin eine Katze als Haustier hat. Ich erwähne, dass ich sie nie mit ihrem Hund Gassi gehen sehe. Du sagst:
- Hat sie nicht eine Katze?
  - Sie hat doch eine Katze, oder?
3. PNZ3 Du glaubst, dass ich vor kurzem den neuen Harry Potter gesehen habe. Als du mich aber fragst, was ich von einer der Szenen halte, habe ich keine Antwort. Du sagst:
- Hast du ihn nicht gesehen?
  - Du hast ihn doch gesehen, oder?
4. PNZ4 Du glaubst, dass eine unserer Freundinnen eine Beziehung hat. Ich erzähle dir aber, dass sie gesagt hat sie hatte gestern ein Date. Du sagst:
- Hat sie nicht einen Freund?
  - Sie hat doch einen Freund, oder?
5. PNZ5 Du glaubst, dass einer unserer Freunde im Restaurant zu uns stößt. Als wir da sind, schlage ich aber vor, dass wir direkt bestellen. Du sagst:
- Kommt er nicht?
  - Er kommt doch, oder?
6. PNZ6 Ich halte dieses Jahr einen wichtigen Vortrag. Du glaubst, er ist noch lange hin, aber ich erzähle, wie nervös ich bin. Du sagst:

- Ist es nicht noch ein paar Monate hin?
  - Es ist doch noch ein paar Monate hin, oder?
7. PNZ7 Du glaubst, dass Fisch zum Abendessen für unsere Freundin okay ist. Ich erwähne aber, dass sie Vegetarierin ist. Du sagst:
- Isst sie nicht Fisch?
  - Sie isst doch Fisch, oder?
8. PNZ8 Du glaubst, dass es kein Problem ist, wenn du zu unserer Verabredung im Café ein bisschen zu spät kommst, aber ich bin genervt. Du sagst:
- Kannst du nicht einfach ein Buch lesen?
  - Du kannst doch ein Buch lesen, oder?.
9. PNZ9 Du glaubst, dass mir ein scharfes Abendessen, das du gekocht hast, schmecken würde. Ich schiebe das Essen aber nur auf meinem Teller hin und her und sehe unglücklich aus. Du sagst:
- Probierst du es nicht?
  - Du probierst es doch noch, oder?
10. PNZ10 Ein Freund kommt zu Besuch und es regnet. Du denkst gar nicht darüber nach, aber dann sage ich „Er wird ja komplett nass.“ Du sagst:
- Wird er nicht einen Schirm haben?
  - Er wird doch einen Schirm haben, oder?

## Filler

### ø/negative

1. ONZ1 Wir machen gleich Feierabend. Manchmal nimmst du mich mit dem Auto mit, aber heute nehme ich einen Fahrradhelm aus dem Regal. Du sagst:
- Brauchst du nicht eine Mitfahrgelegenheit?
  - Brauchst du keine Mitfahrgelegenheit?
2. ONZ2 Wir sprechen über ein ausverkauftes Konzert in der nahen Zukunft. Ich sage, dass ich nicht hingehere. Du sagst:
- Hast du nicht ein Ticket bekommen?
  - Hast du kein Ticket bekommen?
3. ONZ3 Wir sprechen über Bäder. Ich sage, dass ich seit Jahren kein Bad mehr genommen habe. Du sagst:
- Hast du nicht eine Wanne im Bad?
  - Hast du keine Wanne im Bad?

4. ONZ4 Du hast Kuchen für alle mitgebracht. Ich frage, ob ich ein Stück haben kann.  
Du sagst:
  - Oh, hast du noch nicht ein Stück gehabt?
  - Oh, hast du noch kein Stück gehabt?
  
5. ONZ5 Du erzählst, dass du deinen Hund für ein Picknick in den Park mitnehmen willst. Ich sage aber, dass mein Cousin auch kommt und du ihn besser zu Hause lässt.  
Du sagst:
  - Ist er nicht ein Hundefreund?
  - Ist er kein Hundefreund?
  
6. ONZ6 Du schlägst vor, zum Café um die Ecke zu gehen. Ich sage „Ach, du meinst die Bar?“ Du sagst:
  - Ist es nicht mehr ein Café?
  - Ist es kein Café mehr?
  
7. QNZ7 Ich erzähle dir, dass ich ein neues Handy brauche, weil mein altes den Geist aufgegeben hat. Du sagst:
  - Kannst du damit nicht einmal mehr SMS schreiben?
  - Kannst du keine SMS mehr schreiben?
  
8. QNZ8 Du sagst mir, dass du überhaupt nicht singen kannst. Ich lache und nicke verständnisvoll. Du sagst:
  - Kannst du auch nicht singen?
  - Kannst du ebenfalls nicht singen?
  
9. ONZ9 Ich erzähle dir von unserer Freundin, die ohne Übergangsphase von ihrem alten Job in einen neuen wechselt. Du sagst:
  - Wird sie nicht zwischendurch Urlaub machen?
  - Wird sie zwischendurch keinen Urlaub machen?
  
10. ONZ10 Ich erzähle dir, dass ich dieses Wochenende bei einem Event eine 12-Stunden-Schicht arbeite. Meine Chefin meinte, ich solle mich auf viel Betrieb einstellen und vorher genug essen. Du sagst:
  - Wirst du gar keine Pause bekommen?
  - Wirst du nicht eine Pause bekommen?

**-p/neutral**

1. NNX1 Wir reden über Spinnen und du bist dir ziemlich sicher, dass ich keine mag, deshalb sagst du:



- Du magst keine Spinnen, oder?
  - Magst du keine Spinnen?
2. NNX2 Wir machen Feierabend. Du bist ziemlich sicher, dass ich heute mit dem Auto da bin, deshalb sagst du:
- Du brauchst heute keine Mitfahrgelegenheit, oder?
  - Brauchst du heute keine Mitfahrgelegenheit?
3. NNX3 Wir spielen in einer lokalen Liga im Fußball. Ich erzähle von einer der Mannschaften. Du bist dir ziemlich sicher, dass sie in dieser Saison noch kein Spiel gewonnen haben, deshalb sagst du:
- Sie haben nicht ein Spiel gewonnen, oder?
  - Haben sie nicht ein Spiel gewonnen?
4. NNX4 Wir reden über eine Freundin, die eine Wohnung sucht. Du bist dir ziemlich sicher, dass sie noch nichts gefunden hat, deshalb sagst du:
- Sie hat noch keine Wohnung gefunden, oder?
  - Hat sie noch keine Wohnung gefunden?
5. NNX5 Du hast zu einer Party bei dir eingeladen. Du bist dir ziemlich sicher, dass unsere Fußballmannschaft nicht kommen kann. Ich habe sie heute gesehen, und du sagst:
- Sie kommen heute nicht, oder?
  - Kommen sie heute nicht?
6. NNX6 Manchmal gibt es in unserem Park kostenlose Konzerte. Dieses Wochenende ist ein Konzert, aber du meinst, dass man Tickets kaufen muss. Du sagst:
- Es ist dieses Wochenende kein kostenloses Konzert, oder?
  - Ist es nicht ein kostenloses Konzert dieses Wochenende?
7. NNX7 Wir kochen für einen Freund Abendessen. Du bist dir ziemlich sicher, dass er gegen Nüsse allergisch ist und sagst:
- Er verträgt keine Nüsse, oder?
  - Verträgt er keine Nüsse?
8. NNX8 Du suchst einen Pianisten für ein Konzert heute Abend. Du bist dir ziemlich sicher, dass ich kein Klavier spiele, aber du hast nicht mehr viel Zeit. Deshalb fragst du:
- Du kannst nicht Klavier spielen, oder?
  - Kannst du nicht Klavier spielen?
9. NNX9 Du bist dir ziemlich sicher, dass ich keine Oliven mag. Du bietest allen welche an und sagst:

- Du willst keine Olive, oder?
  - Willst du keine Olive?
10. NNX10 Du willst mit mir über eine Szene in Game of Thrones von gestern reden. Du bist ziemlich sicher, dass ich die Serie nichts schaue, willst aber nicht spoilern. Deshalb sagst du:
- Du schaust es nicht, oder?
  - Schaust du es nicht?

### -p/positive

1. NNZ1 Du fondest den Film, den wir gestern abend gesehen haben, total schrecklich. Ich fange aber an, von einer meiner Lieblingsszenen zu erzählen und zu lachen. Du sagst:
  - Der Film hat dir doch nicht *gefallen*, oder?!
  - Der Film hat dir *gefallen*?!
2. NNZ2 So weit du weißt, kann ich Kaffee nicht leiden. Du machst Kaffee für ein paar Freunde und ich sage „Hey, und ich?“ Du sagst:
  - Du willst doch keinen *Kaffee*, oder?!
  - Du willst einen *Kaffee*?!
3. NNZ3 Du weißt, dass unsere Freundin Hunde liebt, aber sie hat eine Allergie. Ich habe sie aber gestern mit einem Hund Gassi gehen sehen. Du sagst:
  - Sie hat doch keinen Hund, oder?
  - Hat sie einen Hund?
4. NNZ4 Der Geburtstag eines Freundes steht vor der Tür, und du hast ihm eine Karte gegeben. Du hast ihm gesagt, dass er sie nicht vor seinem Geburtstag aufmachen darf. Ich habe ihn aber gesehen und er hat gesagt, dass er sich sehr über die Karte gefreut hat. Du sagst:
  - Er hat sie doch noch nicht aufgemacht, oder?
  - Hat er sie schon aufgemacht?
5. NNZ5 Du feierst deinen Geburtstag und bist dir ziemlich sicher, dass unsere Freundin keine Zeit hat. Ich erwähne allerdings, dass sie Kuchen mitbringen wird. Du sagst:
  - Sie kommt doch nicht, oder?
  - Kommt sie?!
6. NNZ6 Du bist dir ziemlich sicher, dass zwei unserer Freunde nur gut befreundet sind. Ich erzähle dir aber, dass ich sie gestern Händchen halten gesehen habe. Du sagst:
  - Die sind doch nicht zusammen, oder?!
  - Sind die zusammen?!

7. NNZ7 Wir sind in Paris in Urlaub und haben uns verlaufen. Du bist dir ziemlich sicher, dass ich kein Französisch kann, aber ich biete an nach dem Weg zu fragen. Du sagst:
  - Du kannst kein Französisch, oder?!
  - Kannst du Französisch?!
  
8. NNZ8 Wir gehen zu einer offiziellen Veranstaltung. Du bist dir ziemlich sicher, dass der Dresscode Black Tie ist. Ich sage aber, dass ich ein T-Shirt tragen will. Du sagst:
  - Du kannst doch kein T-Shirt tragen, oder?!
  - Kannst du ein T-Shirt tragen?!
  
9. NNZ9 Wir kochen zusammen. Du bist dir ziemlich sicher, dass das Essen nur 10 Minuten braucht, aber ich habe die Eieruhr auf 20 Minuten gestellt. Du sagst:
  - Es braucht doch keine 20 Minuten, oder?!
  - Braucht es 20 Minuten?!
  
10. NNZ10 Ein gemeinsamer Bekannter hat den vierten Platz bei einem Marathon gemacht. Du bist dir ziemlich sicher, dass nur die ersten drei einen Preis bekommen. Ich erwähne aber, dass er bei der Preisverleihung dabei sein wird. Du sagst:
  - Er bekommt doch keinen Preis, oder?
  - Bekommt er einen Preis?

# Appendix C

This appendix includes the materials and consent form for the experiment on rhetorical questions presented in chapter 6.

- i) Consent form
- ii) Materials



## Consent for Participation in Experiments, Data Use, and Data Storage

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<b>Study title:</b>	PhD research
<b>Principal Investigator:</b>	Professor Caroline Heycock
<b>Researcher collecting current data:</b>	E Jamieson

**Nature of the study.** You are about to participate in a study which has two short parts. In one section, you will rate sentences on a scale from 1-5. In the other section, you will be asked to choose the most acceptable response to a statement from two possible answers. Your responses will be recorded. Your session should last for around 20 minutes. You will be given full instructions shortly.

**Risks and benefits.** There are no known risks to participation in this study. The only benefits to you personally are those you draw from making a contribution to our knowledge about language and its use.

**Confidentiality.** The data we collect will not be associated with your name or with any other personal details that might identify you.

**Voluntary participation and right to withdraw.** Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you choose to withdraw afterwards, please use the contact information below, we will delete your data and there will be no penalty or loss of benefits to which you are otherwise entitled.

**Contact information.** This research is being conducted by the above-listed researchers at the University of Edinburgh. The researchers can be contacted at [e.jamieson@sms.ed.ac.uk](mailto:e.jamieson@sms.ed.ac.uk) or [caroline.heycock@ed.ac.uk](mailto:caroline.heycock@ed.ac.uk) for questions or to report a research-related problem. Contact the Linguistics & English Language Ethics committee at 0131 651 5510 or [l1.ethics@ed.ac.uk](mailto:l1.ethics@ed.ac.uk) if you have concerns regarding your rights as a participant in the research.

If you have any questions about what you've just read, please contact the researchers before continuing.

Thank you for your help!

By clicking accept, you consent to the following:

1. I agree that the anonymized data I produce may be **kept permanently in Edinburgh University archives** and used **for the specific research project** which made them.
2. I agree that the anonymized data I produce **may be used by the above-named researchers, as well as by other qualified researchers, for teaching or research purposes, and in professional presentations and publications.**
3. I agree that that the anonymized data I produce **may be made publicly available for general use**, e.g. used in radio or television broadcasts, or put on the world-wide web.
4. I understand that I have the **right to terminate this session** at any point. If I choose to **withdraw after completing the study**, my data will be deleted at that time.

There's a new job coming up at your company. It's two grades above the one you've already got. I'm always very supportive of your work, and I suggest you should apply. You say:	I'm not going to apply because...	what could I bring to the table?!	WH
		could I bring anything to the table?!	YN
		I'm not ready for that.	DECL
		I don't bring anything to the table.	DECL
Our basketball club is having an AGM. Neither of us are on the committee and so neither of us <i>have</i> to be there. We're discussing it, and you say:	I won't be there because...	who can be bothered with that?!	WH
		can anyone be bothered with that?!	YNQP
		can I be bothered with that?!	YN
		I can't be bothered with that.	DECL
		I have better things to do.	DECL
I am passing around some fermented fish I bought in Iceland. I offer it to you and you say:	I'm not having any because...	who wants to eat rotting fish?!	WH
		does anyone want to eat rotting fish?!	YNQP
		do I want to eat rotting fish?!	YN
		I don't want to eat rotting fish.	DECL
		I think it sounds gross.	DECL
I'm getting an Amazon Alexa. You think they're a bit pointless. I tell you about the one I'm getting and you say:	I wouldn't get one because...	what would I do with it?!	WH
		would I do anything with it?!	YN
		I would never use it.	DECL
		I think they are pointless.	DECL
We have been offered two meet and greet tickets for a Beyoncé concert. We both really like her, but it's at a time when we're both really busy. You say:	I'm going anyway, because...	who doesn't want to meet Beyonce?!	WH
		doesn't everyone want to meet Beyonce?	YNQP
		don't I want to meet Beyonce?!	YN
		it would be ridiculous not to.	DECL
		I really want to meet her.	DECL
You love trying new foods. I have just bought a selection of really hot chillis and I say I'm going to put one in a curry I'm making. I'm worried no one will want to eat it but you say:	I will, because...	what wouldn't I eat?!	WH
		wouldn't I eat anything?!	YN
		I would try anything.	DECL
		it sounds great.	DECL
You have won a raffle and you get to choose between the two remaining prizes. There are some Amazon vouchers, and a bottle of champagne. You say:	I'll take the vouchers because...	what couldn't I get with them?!	WH
		couldn't I get anything with them?!	YN
		I could get anything with them.	DECL
		that way there's loads I can get.	DECL
You've made a big cake. Lots of people at your work are on a diet but you know they love treats. So you say:	I'll take the cake into work anyway because...	who won't have just a small slice?!	WH
		won't everyone have just a small slice?!	YNQP
		won't they have just a small slice?!	YN
		everyone will have a small slice.	DECL
		they will all appreciate it.	DECL