

Explaining variability in negative concord:

A sociosyntactic analysis

David Adger & Jennifer Smith

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QMUL/University of Glasgow

Abstract

In Cheshire's (1982) seminal study of Reading adolescents, it is no surprise to find robust use of negative concord, the most ubiquitous 'vernacular universal' of varieties of English worldwide. In this paper we analyse one aspect of the grammar of negative concord in a variety spoken in Scotland: the variability in the expression of a sentential negation marker in the presence of a negative noun phrase. We develop a syntactic analysis that accounts for the quantitative patterns in our corpus, which further extends to concrete, and correct, predictions about unobserved forms. Our analysis also has implications for understanding both why negative concord is a vernacular universal, and for accounting for differences in individual speakers' grammars and their use.

1. INTRODUCTION

Among the range of variables heard in the Reading playground in Cheshire's (1982) seminal study, there is robust use of negative concord (1a-d).

- (1) a. That's where we go clubbing when there *ain't nothing* to do. (Jeff)
- b. You can come down here, mate, and talk to me 'cos I *won't* have
 no-one to talk to. (Derek)
- c. That bloody stuff *don't* do *no good* anyway. (Julie)
- d. And I *couldn't* get *no sleep*. (Mandy)

Negative concord is the expression of sentential negation involving both a negative clitic like *n't*, and a negative quantifier (phrase), like *nothing*, *no-one*, or *no good*.

This ‘vernacular universal’ which ‘recurs ubiquitously all over the world’ (Chambers, 1995: 242) (see e.g. Cheshire 1982; Coupland 1988; Edwards 1993; Howe & Walker 2000; Schneider 1989), is a quintessential linguistic variable: for speakers who have negative concord in their grammar, such as the teenagers in the Reading playground, (2a-c) can convey the same meaning.

- (2) a. You can know who he is cos he’s got one ear bitten by leprosy, but the police *don’t* do *nothing* about it. (Debbie)
- b. You can know who he is cos he’s got one ear bitten by leprosy, but the police *don’t* do *anything* about it.
- c. You can know who he is cos he’s got one ear bitten by leprosy, but the police do *nothing* about it.

If both the negative clitic, and the negative quantifier can express sentential negation on their own (2b and 2c), then a question arises as to why sentential negation can be expressed by both (2a). As Labov (1972: 774) notes, the ‘immediate problem for the linguist [...] is to discover the nature of the rule which produces such an effect’. Sociolinguistic research has focussed on discovering both social and linguistic constraints on the use of these forms. For example, in Cheshire’s Reading playground, the boys use negative concord such as (2a) at higher rates than the girls and there are higher rates of negative concord when the post-verbal negative noun phrase is a full noun phrase (3a), as opposed to a pronoun (3b) (Cheshire 1982: 65).

- (3) a. Oy, Hitler, you’re gonna get your head bashed in. *Not* saying *no* names. (Dave)
- b. Give us that book, else I won’t give you *none*, Alec. (Smithy)

In addition to quantitative differences within and across varieties, categorical differences also exist. In Cheshire’s (1982: 63) words: ‘Although negative concord occurs in most nonstandard varieties of English, its syntactic distribution often varies’. For example, Cheshire states that negative concord in her Reading sample does not occur where there is a Subject negative noun phrase (4), but this form is widely attested in other varieties (e.g. Labov 1972:806, Wolfram & Christian, 1976:112).

- (4) *Nobody couldn't handle him.* (Appalachian English. Wolfram & Christian, 1976:112)

From the perspective of syntactic theory, the challenge is to understand not only how the various negative elements combine to produce the meanings they have, but also to explain how the grammatical patterning of negative concord distributes both within varieties and across them, and to provide a characterization of the syntactic rules that underlie both the categorical and variable patterns. Childs (2017), in a recent evaluation of two syntactic approaches to the syntax of negative concord across a range of varieties in the U.K., argues for the superiority of an account of the cross-variety pattern of variation that appeals to syntactic movement of the negative quantifier. Here we support that position, as well as the broad approach, focusing in depth on variation within a single dialect.

Most previous sociolinguistic research has analysed the variability between negative noun phrases and adverbials (like *no names*, *nothing*, or *nowhere*) and their non-negative variants (like *any names*, *anything*, and *anywhere*) in the context of sentential negation (the negative marker *n't*, or its non-clitic form *not*). In this paper, we flip this around, and focus on addressing the question of variation in the presence vs. absence of a sentential negation marker (like *n't*) in the context of a negative noun phrase. We argue that, once we take account of the sociolinguistic factors, much of the variation can be explained by a range of grammatical factors. The approach we develop also provides a basis for understanding why negative concord is close to a vernacular universal in varieties of English.

2. DATA AND METHODOLOGY

Buckie is a small fishing town situated on the north east coast of Scotland, 60 miles from Aberdeen. The data come from a corpus of sociolinguistic interviews with 49 speakers, stratified by age and gender, in conversation with both a community insider and outsider. Here, we use the data from the insider interviews only, with this subsection of the corpus totalling approximately 400,000 words. We use quantitative data from this corpus to motivate a number of generalizations about how the presence

or absence of negative concord is influenced by verb-type in the variety, and we develop a theory to account for these generalizations (see also Burnett, Koopman and Tagliamonte, 2018). In addition to the quantitative data from the corpus, we test novel predictions of the theory we develop via grammaticality judgments, and meaning-form judgments, from native speakers of the variety.

3. QUANTITATIVE ANALYSIS

Previous work on negative concord in Buckie (Smith 2001) examined variability in the form of the negative noun phrase: is it realized with a negative determiner, *nae*, as in (5a) or a pronominal version, as in (5b)? Or, on the other hand is it realised as a negative polarity determiner, *any*, as in (6a), or a pronominal version, as in (6b)? In addition, what social and linguistic constraints affect this realization?

- (5) a. If it wasna for them there wouldna be *nae shops* in Buckie.
b. I'm *nae* going to get *nothing* back.
- (6) a. I *canna* see *any* tonic, I'm *nae* drinking gin without tonic.
b. She *wouldna* let *anybody* call me anything.

Similar to Cheshire's (1982: 65) data from Reading, negative pronominals (e.g. *nothing*) in Buckie were found to have higher rates of negative concord than negative noun phrases (e.g. *nae shops*), an effect that Smith (2001) attributes to frequency arising from the open vs. closed class status of negative forms, plus accompanying historical factors (see also Howe 1995).

In the present paper, in contrast, we concentrate on the variability in the presence or absence of the sentential negation clitic *n't*, variably realised as *na* in Buckie (5a), or its non-clitic form *not*, variably realised as *nae* (5b), and whether there is a negative noun phrase elsewhere in the sentence. We are particularly interested in explaining the kind of variability illustrated in (7a) and (7b), where both have a sentential negation meaning, but sentential negation itself can be absent.

- (7) a. She *didna* have *nothing*.
b. She had *nothing*.

We first removed examples of negative Subjects from the quantitative analysis, as our observation of the data showed categorical absence of sentential negation when the Subject is negative, much as Cheshire (1982: 64) found in Reading. For example, though we have cases like (8a), there are no examples like (8b), and native speakers reject them. We return to why this is the case in section 4.

- (8) a. *Nobody* left.
- b. **Nobody* *didna* leave.

We also removed cases of ‘or nothing’ tags, such as (9). These serve a distinct discourse function, and can never be used on their own to express sentential negation, unlike negative noun phrases.

- (9) Apparently you're *nae* allowed phones *or nothing* there.

In the remaining data, three main patterns emerge in the marking of negation. The first is a sentential negation clitic with a negative polarity item (10). We will call this Standard Negation. The second is a sentential negation clitic with a negative noun phrase object (11). We will call this Negative Concord. Finally, there are cases where the negation is expressed solely by a negative noun phrase, i.e. there is no sentential negation clitic present (12). We term these Negative NP Negation. All three are means of expressing semantic sentential negation.

- (10) a. I *canna* see *any* tonic, I'm *nae* drinking gin without tonic.
- b. She *wouldna* let *anybody* call me anything.
- (11) a. Stuff like that *wouldna* do you *no harm* anyway.
- b. Fishermen *dona* get *nothing*. Not a penny.
- (12) a. I've got *nothing* to worry about.
- b. Then the elevator opened and there was *nobody* there.

Table 1 shows the proportion of the three types in Buckie.

Table 1: Distribution of sentential negation in Buckie

Standard sentential negation		Negative concord		Negative noun phrase negation	
N	%	N	%	N	%
196	39	172	34	139	27

There is robust variation in the three types of negation in the Buckie variety: Standard Negation appears 39% of the time, Negative Concord 34% and Negative NP Negation at 27%. However, when we examined the data further, we found that the type of main verb has a major impact on the structuring of the variation: specifically, whether the form was existential *be* (13), main verb (possessive) *have* (14) or other lexical verbs (15).

- (13) a. *There wasna any* witness.
b. I was wanting to go to Barcelona but *there wasna nae* places.
c. *There was really nothing* else I wanted to take fae the list.
- (14) a. They *havena any money*¹.
b. They've never nae beds and Elgin *havena nae beds*.
c. I couldna get picked up fae nobody 'cause *they had nae room* in their car.
- (15) a. I *dona mind anybody* sticking a needle in.
b. He didna get much warning, he *didna get nae warning* at all really
c. I really *ken nothing* about it.

Table 2 shows the proportion of these different verb types across the three different negation structures.

Table 2: Distribution of sentential negation by structure in Buckie

¹ 14a is not found in the current corpus, but is grammatical in this variety. The lack of such examples in the data may arise from the very infrequent occurrence of *have* as a main verb more generally as demonstrated in Table 2.

	Existential <i>be</i>		<i>Have</i> main verb		Other lexical verb	
	N	%	N	%	N	%
Standard sentential negation	7	6	0	0	189	51
Negative concord	2	2	3	17	167	45
Negative noun phrase	111	93	15	83	13	4

Table 2 shows that the makeup of standard negation and negative concord is very similar – nearly all of the data appears within the main lexical verb category. There is barely any use of existential *be* or main verb *have* in these constructions. Looking at existential *be*, from a total of 120 tokens, we find almost all of these are negated via the Negative noun phrase strategy (93%). The same is true for possessive *have* (83%), although the raw numbers here are much smaller (N=18).

As the quantitative analysis shows, the structure of negation differs substantially in Buckie in terms of patterning across verb type. How can such a pattern be explained?

4. SYNTACTIC ANALYSIS

In this section we provide a syntactic analysis that explains a number of aspects of these patterns of variation. We first outline our assumptions about clause structure, and the theory of negation we adopt, following Haegeman's (1995) proposal that sentential negation semantics involves syntactically licensing a negative projection in the clause. Section 4.2 then briefly turns to how that approach captures variability in the form of negative Objects and 4.3 addresses the question of the syntax of Negative NP Negation structures. We take the former to involve variability in morphological form of the negative Object (cf. Labov 1972), and argue that the latter involves a licensing of the negative Object at a distance from the sentential negation projection. With this in place, in Section 4.4, we show how the Buckie pattern, where Negative Subjects cannot appear with a sentential negation marker, but negative Objects can, follows from the theory. We then look at the quantitative effects discussed above, showing in Section 4.5 why possessive *have* behave differently from lexical main verbs, and, we extend this approach to existential and predicative *be* in Section 4.6.

4.1 Syntactic Assumptions

We will assume that sentences of English involve a tripartite syntactic structure: there is a verb phrase (VP) domain, where the verb selects its Subject, Object, and other arguments; a tense phrase (TP) domain, where tense information in the sentences is specified and where finite auxiliaries appear in English; and a complementizer phrase (CP) domain, which expresses the grammatical force (statement, question, etc.) of the sentence, and is where complementizers in embedded clauses appear (like the words *that* or *whether*). We will ignore the CP domain in what follows.

Following much work (see, e.g. Adger 2003, for review and motivating arguments), we represent syntax as a series of hierarchical structures. We use the kinds of structures and terminology associated with Minimalist Syntax, but many other theories adopt broadly similar ideas:

(16) [TP Auxiliaries [VP Subject [Verb Object]]]

We also adopt the idea (again, see Adger 2003) that the Subject is selected by the verb inside the verb phrase, but, in many English sentences, it appears in the tense phrase domain, pronounced before finite auxiliaries, as in the following examples, where the emphatic auxiliary *did*, or the aspectual auxiliary *have*, bear finite tense marking:

(17) The girl DID often see films.

(18) The girl has often seen films.

Here, the Subject, *the girl*, is a selected dependent of the verb *see*, but appears at some remove from it, in front of the auxiliary, in the tense phrase domain. This means that syntactically, the Subject connects to the verb in terms of meaning (it is a semantic agent of the verb *see*) and to the auxiliary in terms of where it is pronounced in the structure. In our structures we will therefore represent the Subject in both the position that marks a dependency with the verb (but is not pronounced), and in the position

before the auxiliary, where the Subject is pronounced, enclosing the unpronounced token of the Subject in angled brackets, as in (19).

- (19) The girl DID often <the girl> see films.

Minimalist Syntax implements the idea that the Subject bears dependencies to both the tense phrase domain and the verb phrase domain by saying that the grammatical rules that build up this sentence initially place the Subject inside the verb phrase, local to the verb whose Subject it is, and further rules displace the Subject to a higher position in the sentence, so that it is inside the tense phrase. This displacement operation is tightly constrained: it moves the Subject higher in the structure to the closest position that is grammatically relevant to it. In the current case, this is the position immediately adjacent to the finite auxiliary. In Minimalist Syntax, this position is called the Specifier of the tense phrase (what traditional grammars call the Subject position). English, unlike many other languages, requires that sentences, to be grammatical, have a noun phrase in this position (Lasnik 2001). This movement operation will become important in our analysis of the variability of negative concord in Buckie.

Negation can be expressed in any of these domains (Zanuttini 1997), but in English, sentential negation is expressed in the TP domain via a specialized Negative position, which occurs below the finite auxiliary, but above verb phrase modifiers like *often*. The usual expression of sentential negation in English is a negative clitic (*n't* in many varieties, *na* in Buckie):

- (20) The girl didna often see films.

We can extend our structure for sentences with this negative element as follows:

- (21) [TP Subject [Negation ... [VP <Subject> [Verb Object]]]]

With this in place, the theory we adopt of sentential negation is the following (cf. Haegeman's (1995) Neg-Criterion):

- (22) The Negation position must be linked to a pronounced negative element.

The devil will be in the details of what ‘linked’ can mean.

Most commonly, the linking is met by simply locating a negative clitic in the Negation position:

- (23) [TP The girl did [Negation na [VP often see films]]]

4.2 Explaining variability in the form of negative Objects.

This theory of negation makes it straightforward to handle the variability between Standard Sentential Negation and Negative Concord in, for example, the following sentences:

- (24) I *didna* see *any films*.

- (25) I *didna* see *nae films*.

In both cases, all that is happening in Buckie, or in Cheshire’s Reading data, is that sentential negation is being expressed by *na* or *n’t*. Variability between *any films* and *nae films* can be dealt with by variable expression of the negative determiner *any* vs *nae*, following the line of analysis instigated by Labov (1972). That variability (what Adger (2006) calls Variability in Exponence), is subject to the usual sociolinguistic pressures discussed by Cheshire 1982, and, for Buckie, Smith, 2001.

4.3 Negative NP Negation

However, this theory does not yet provide an analysis of cases where there is a negative noun phrase Object, but there is no sentential negation, what we call NP Negation as in Standard English (26), or the Buckie (27):

- (26) I saw no films.

- (27) a. There was really *nothing* else I wanted to take fae the list.
b. I couldna get picked up fae nobody 'cause they had *nae room* in their car.
c. I really ken *nothing* about it.

So far, the theory we have developed predicts, apparently incorrectly, that Negative NP Negation, as in (27), should not express sentential negation, since the Negation position is outside the verb phrase, and has nothing linked to it. However, a closer look at the data shows that the situation is not as straightforward as it first seems.

Looking first at the cases with lexical main verbs in Buckie (e.g. 27c), it turns out that, in contrast to judgments reported for Standard English (Labov 1972), these examples don't have a simple sentential negation reading. They must involve emphatic focus on the Object, focus that is typically expressed by emphatic stress on the Object, as follows:


- (28) I saw *NAE films*

In terms of meaning, (28) does not express sentential negation. It is not a denial of the fact that any films were seen, it's rather a correction of a presupposition that some films were seen (Puskas 2012). We return to the existential and main verb *have* cases below, as these do express sentential negation, and are still problematic for the theoretical proposal in (22). The special meaning of a negative noun phrase with a lexical verb is consistent with the low frequency of this combination (4% in Table 2).

Of course, (22) still leaves open the problem of accounting for varieties of English, like Standard English, where a sentential negation reading of (28) is actually possible.

The solution to this problem turns upon the interpretation of the word 'linked' in our theory of sentential negation. To capture the behaviour of Standard English, we need to say that the link between the Negative position and the negative Object must be allowed to be 'stretched'. That is, the Negative position is linked to *at a distance* by the negative noun phrase Object (whether by movement, as in Kayne 1998, or by c-command as in Zeijlstra 2004). We could represent this like this:

(29) [TP The girl [Negation [VP saw no films]]]



The details of the theory of how this link is made will not concern us here, as our focus is on the Buckie patterns.

This linking at a distance appears to be a highly marked option (Huang 2003 points out that the Buckie pattern, where negative Subjects do not co-occur with a sentential negation marker, while negative Objects do, is widely found cross-linguistically, including in Mandarin, Norwegian, and Japanese). The pattern where a negative Object does not occur with a sentential negation marker (as in Standard English), is rarer. We speculate that the Standard English syntax is a solution that speakers' grammars adopt, in order to conform to prescriptive norms imposed by linguistic ideologies (Cheshire and Milroy 1993). These ideologies have, over the development of Standard English, sought to maintain the idea that a single semantic negation should correlate with a single syntactic expression of negation. However, vernacular Englishes (and languages in general Haspelmath 2001) appear to work on a much simpler and more direct grammatical rule, that imposes no such requirement, and therefore allows sentential negation to be directly expressed in the Negation position in clausal structure. This then allows a negative Object to co-occur with a sentential negation marker, giving a negative concord pattern with negative Objects. This is presumably why such negative concord is, as Chambers has pointed out, close to a vernacular universal of English.

4.4 Negative Subjects

With this basic approach in place, we now turn to the observation we made in section 3, that when the Subject is a Negative Noun Phrase, we find a categorical absence of the negative clitic to express sentential negation. This is clear from the corpus data, where there are no examples of Negative Noun phrase Subjects with the sentential negation clitic *na*, or its non-clitic form *nae*. It is backed up by grammaticality judgment evidence, where examples like (30b) are rejected by speakers of the variety:

- (30) a. *Nobody* was any better off than anybody else
 b. **Nobody wasna* any better off than anybody else

Our syntactic analysis of sentence structure combined with the theory of negation in (22) leads us to expect this pattern of data.

To see this, recall that, to express sentential negation, the Negative position must be linked to a pronounced negative element. We have adopted the view, standard in Minimalist Syntax, that the Subject, though it is pronounced once, appears in multiple positions in the syntactic representation: the grammatical rules of English locate the Subject close to the verb that selects it, and then move that Subject to a higher position that is grammatically relevant for it. In the case of a negative Subject like *naebody*, that noun phrase moves to the Negation position, which is grammatically relevant for it, before then moving to its final resting place to the left of the finite auxiliary. The first of these movements satisfies the link that needs to be made between Negation and a pronounced negative element, thereby allowing the sentence to express sentential negation. The second places the Subject in the usual surface position for Subjects in English. This gives us the following structure:

- (31) [TP Nobody was [Negation <Nobody> [VP <Nobody> any better off
 ...]]]

In this example, *nobody* satisfies the requirement that Negation be linked with a pronounced expression of negation. This means that this example can express sentential negation. The ‘link’ here is just the same as the link created when *na* is located in the Negative position. *Nobody* is located in three positions in our example: in the position where it is selected by the verb, in the Negative position, and in the position before the finite auxiliary where it is pronounced. Since *nobody* is located in Negation, *na* is not, capturing the impossibility of *na* in examples like (30b)².

² There are varieties, as we noted earlier, which allow a negative Subject to co-occur with a sentential negation marker (e.g. AAVE, Labov 1972). We take this to be a parametric question of whether the specifier and head can both be filled simultaneously.

Let us now turn to our main quantitative findings: the type of the main verb impacts on the variable realization of the sentential negation clitic.

4.5 The effect of verb type: possessive *have*

We saw that sentential negation appears variably with main verb *have* when *have* has a negative Object:

- (32) a. Elgin *havena nae beds*
b. They *had nae room* in their car.

Buckie, like many varieties of Scots allows main verb *have* to appear either inside the verb phrase domain, or in the tense phrase domain. We can see this by looking at adverbs:

- (33) a. They've often lots to do at the end of the day.
b. They often have lots to do at the end of the day.

Here, *have* appears on either side of the adverb *often*, contracted in (33a). Crucially, in (33a), that adverb separates *have* from its complement *lots to do*. This is a signature of a verb being displaced out of the verb phrase (Pollock 1989).

This behaviour of *have* in Buckie opens up an explanation for the variability of the expression of sentential negation with a negative noun phrase Object. In cases where *have* appears in the TP domain, in the same position where tensed auxiliaries appear, the Object may move to Negation, just as negative Subjects do. This gives us a structure for (32b) that looks as follows:

- (34) [TP They had [Negation nae room [VP <had> <nae room> in their car
]]]

In this structure the position and order inside the verb phrase between *have* and its negative Object are now mimicked higher up in the clause (Fox and Pesetsky 2005), with *nae room* linked to Negation, allowing expression of sentential negation. The

variant where *na* does appear (as in 32a) is legitimate because the Object, in this case *nae beds*, stays in its original position:

- (35) [TP Elgin have [Negation na [VP <have> nae beds]]]

There's an important difference between examples like (32a) and (32b) and the situation with negative Subjects. In the latter case, the Subject *must* move higher in the clause to the standard Subject position in English (the highest position in TP). As mentioned above, this is a requirement of English sentence grammar. In moving from the verb phrase, the Subject obligatorily passes through the Negation position, since that position is grammatically relevant for it. In contrast to this, there is no independent requirement for a negative Object of *have* to move, and thus pass through the Negation position. This means that the movement of *nae beds* to the Negation position in (32a) is optional, unlike the movement of a negative Subject. If the movement takes place, Negation is linked to the negative Object in accordance with (22). In the case where the option is not taken, Negation is instead linked to *na*. The net effect of this is that we will find variability in the expression of sentential negation when main verb *have* has a negative Object. No such option is available for negative Subjects, hence *na* is categorically unavailable. Variability in the expression of the sentential negation clitic *na* in sentences with possessive *have* is therefore only possible when *have* raises.

This approach to the syntax of *have* makes a prediction. In Buckie, we can force *have* to remain inside the VP. Only finite *have* can appear in the finite auxiliary position. This means that if we look at sentences where that position is filled by a different finite auxiliary, like a modal, then non-finite *have* must be inside the verb phrase. In that situation, we predict that we must use the negative clitic *na*, since if we don't have *na*, and we don't move the negative Object, we can't express sentential negation. The prediction is correct. When we test these examples with native speakers, it turns out that (36a) does not have a sentential negation reading, while (36b), as expected, does:

- (36) a. *They can have nae bairns.
b. They canna have nae bairns.

Of course, without saying anything else, if the movement of the negative Object is optional, we also predict (37), which is totally ungrammatical in Buckie, and in all other varieties of English we are aware of (though its analogues are grammatical in older varieties of Norwegian, (Christensen, 1986)):

(37) *They can nae bairns have.

However, (37) is independently ruled out by what has come to be known as Holmberg's Generalization (Holmberg 1986). This essentially requires the order of pronounced verbs and Objects to be maintained both inside the verb phrase and out (Fox & Pesetsky 2005). In (37), the order of the verb and Object is reversed, violating the generalization. A discussion of the theoretical mechanisms that have been used to explain why Holmberg's Generalization holds will take us too far afield here. We will simply assume it constitutes an independent reason why examples like (37) are not found in varieties of English. Holmberg's Generalization will also rule out the movement of a negative Object of a lexical main verb from moving, since lexical main verbs are always inside the verb phrase in English, so there is no way to move the Object without reversing the order.

4.6 The effect of verb type: predicative and existential *be*

We begin this section by discussing predicative uses of *be*, which we show can be explained by the theoretical approach we have developed so far. We then turn to our quantitative findings about existential *be*: we show that although speakers have a strong quantitative preference for the Negative NP Negation strategy, their grammars are still variable, as predicted by this approach.

In Scots, *none* (often spelled *nane*) may have a more widespread function than in Standard English. The Dictionary of the Scots Language describes such use as “*adv.* As an emphatic neg.: not at all, in no way, by no means (n. and m.Sc. 1963). Obs. in Eng. since 17th c” (<https://www.dsl.ac.uk/entry/snd/nane>, s.v. *nane*).

The dictionary provides a number of examples, including (38a-c):

- (38) a. Than ours they're *nane* mair fat and fair.
Edb. 1772: Fergusson Poems (S.T.S.) II. 73
- b. I would hae said he wasna *nane* weel.
Ags. 1889: Barrie W. in Thrums xxii
- c. He wiz nae *nane* surpriz't to see'r.
Abd. 1926: Abd. Univ. Review (July) 223

In Buckie, *none* is still used in this function, though it appears to be restricted to a special class of negative psychological adjectives³:

- (39) a. She was *none* shy.
b. He was *none* feart (afraid).

These negative adjectival phrases can appear without *na* expressing sentential negation, as above in (39), or with *na*, so they show a similar pattern of variability to that observed with main verb *have*:

- (40) a. She *wasna none* shy.
b. He *wasna none* feart.

In all varieties of English, the finite forms of the verb *be* appear in the tense phrase domain, not in the verb phrase (Adger 2003). This means we can analyse these two examples on a par with our analysis of main verb *have*, as follows:

- (41) [TP She was [Negation none shy [VP <was> <none shy>]]]

- (42) [TP She was [Negation na [VP <was> none shy]]]

Just as we saw with *have*, the negative phrase after the verb can either remain in its original position, in which case sentential negation is expressed by the negative clitic

³ (39a) and (39b) do not appear in the current corpus but are used in the community.

na being located in Negation, or by the negative phrase *none shy* itself moving to Negation.

However, there is an interesting difference between main verb *have* with negative quantifiers and main verb *be* with these negative adjectives. Unlike other negative quantifier phrases, *none* in these Scots varieties, as noted by the Dictionary of the Scots Language, is emphatic. We saw above that emphatic negatives could remain in situ. This leads us to expect that, when *be* is not finite, and has not moved into the tense phrase domain, it should be possible to link Negation to *na*, but also possible to leave the emphatic negative adjective phrase in situ. This prediction is correct:

(42) She will *na* be *none* shy with you.

(43) She'll be *none* shy with you

Again, Holmberg's Generalization, or rather the syntactic mechanisms underlying it, predicts the impossibility of **She'll none shy be with you*.

A similar pattern is observed with finite main verb *be* in cases where a negative noun phrase is inside a prepositional phrase. While adjectives have an emphatic negative degree word, creating negative adjectival phrases, prepositional phrases lack any such element. However, it is possible, of course, to have a negative noun phrase inside a prepositional phrase, as in (44):

(44) He *wasna* in *nae* fights.

In these cases, the negative quantifier is not obligatorily emphatic. Sentential negation in (44) is expressed by *na*, as expected. It is impossible to express sentential negation in such cases without *na*, unless the quantifier is stressed.

(45) He was in NAE fights

Such examples, like the cases with negative Objects of main verbs, only have a corrective reading, and require emphatic stress on *nae*. This can be captured by the

approach developed here if we assume that a prepositional phrase can never be negative (intuitively, the prepositional phrase is not negative, though the noun phrase inside it is). This means that it will never move to Negation, so the negative clitic *na* will always be required to express sentential negation⁴. Correctional negation can, however, be expressed by stress on the negative.

The final interesting case with main verb *be* is existentials, which our quantitative analysis picked out as having close to categorical absence of the sentential negation marker when a negative quantifier (phrase) appears to the left of the verb. In an existential construction, the Subject is usually assumed to remain inside the verb phrase, with the verb *be* moving to the tense phrase domain. Under this analysis, a sentence like *There were cakes on the table*, has the following structure (Adger 2003), with the expletive *there* appearing in the surface Subject position, and the Subject itself appearing lower:

(46) [TP There were [VP cakes <were> on the table]]

If the Subject internal to the verb phrase is a negative noun phrase, we now expect that noun phrase to optionally move to the Negation position, or to remain inside the verb phrase, in which case sentential negation will be expressed by *na*. Adapting the example to Buckie grammatical conventions about agreement in existentials, we have the following structures⁵:

(47) [TP There was [Negation nae cakes [VP <nae cakes> <was> on the table]]

(48) [TP There was [Negation na [VP nae cakes <was> on the table]]

⁴ It appears that predicate noun phrases do not allow a negative determiner in Buckie, which is why examples like (i) are ungrammatical:

(i) *Sue and Mary arena nae doctors

⁵ A review raises the interesting possibility that just the negative determiner *nae* raises to Negation, leaving the NP stranded in the lower position. Determining the consequences of this alternative would take us too far aside here. We leave this intriguing possibility for future research.

However, as we saw in Table 2, in the Buckie corpus, existentials appear almost without exception without *na*, suggesting a very strong preference for moving the negative Subject to Negation, as in (47).

Interestingly, acceptability judgment tasks with native speakers clearly showed that they allow negative concord with existentials, considering cases like (49) unexceptionable

(49) There *wasna nae* food for the bairns.

From a perspective where speakers have a surface oriented representation of the variant, such as Construction Grammar approaches (Hoffmann and Trousdale 2011), this is mysterious. Speakers will hear vanishingly few cases such as (49) as they acquire the dialect, so have no basis to posit a negative concord surface variant of the existential construction. However, the theory developed here, where speakers have an abstract grammar of Negation that is responsible for the surface variation, predicts judgments like (49). Speakers must posit an optional movement of a negative noun phrase to Negation, in order to account for optionality of the negative clitic with possessive *have* (and more generally, it is an option allowed by Universal Grammar, constrained by Holmberg's Generalization). Given this, their grammars will allow that movement in existentials too, even though they have no evidence for it in the input data. This is, we think, an advantage of the perspective we take here, as it provides syntactic underpinning for an understanding of the relationship between the structure of language and its use.

5. CONCLUSION

Negative Concord is one of the most widely attested linguistic variables in non-standard varieties of English, with Cheshire's Reading teenagers amply demonstrating this widespread form. In this paper, we have briefly examined the variable grammar of Negative Concord in Buckie, focussing on the variability of the presence versus

absence of sentential negation markers. We have argued that speakers have an abstract set of grammatical rules that govern the variation, and that the complex interactions of categorical and variable phenomena within this domain, noted by Cheshire in her Reading study, can be best explained through an approach that integrates perspectives and ideas from both formal and sociolinguistic theories.

REFERENCES

- Adger, D. (2003). *Core Syntax*. Oxford: Oxford University Press.
- Adger, D. (2006). Combinatorial Variability. *Journal of Linguistics*, 42. 503–530.
- Burnett, H., Koopman, H and Tagliamonte, S. (2018). Structural explanations in syntactic sariation: The evolution of English negative and polarity indefinites. *Language Variation and Change* 30.1: 83-107.
- Chambers, J. K. (1995). *Sociolinguistic theory: Linguistic variation and its social significance*. Oxford: Blackwell.
- Cheshire, J. (1982). *Variation in an English dialect: A sociolinguistic study*. Cambridge: Cambridge University Press.
- Cheshire, J. and Milroy, J. (1993). Syntactic variation in non-standard dialects: Background issues. In *Real English: The grammar of English dialects in the British Isles*, ed. James Milroy and Lesley Milroy, 3–33. London: Longman.
- Childs, C. (2017). Integrating syntactic theory and variationist analysis: The structure of negative indefinites in regional dialects of British English. *Glossa: a journal of general linguistics*, 2 (1). Article 106. 1-31.
- Christensen, K. (1986). Norwegian *ingen*: A case of post-syntactic lexicalization. In *Scandinavian Syntax*, Östen Dahl and Anders Holmberg (eds.), 21-35. Institute of Linguistics, University of Stockholm.
- Coupland, N. (1988). *Dialect in use*. Cardiff: University of Wales Press.
- Edwards, V. (1993). The grammar of southern British English. In J. Milroy & L. Milroy (Eds.), *Real English: The grammar of English dialects in the British Isles*. New York: Longman. 214-242.
- Fox, D., & Pesetsky, D. (2005). Cyclic linearization of syntactic structure. *Theoretical linguistics*, 31(1-2), 1-45.

- Haegeman, L. (1995). *The syntax of negation* (Vol. 75). Cambridge: Cambridge University Press.
- Haspelmath, M. (2001). *Indefinite pronouns*. Oxford: Oxford University Press.
- Hoffmann, T., & Trousdale, G. (2011). Variation, change and constructions in English. *Cognitive Linguistics*, 22(1), 1-23.
- Holmberg, A. (1986). *Word order and syntactic features in the Scandinavian languages and English*. Stockholm: Department of General Linguistics, University of Stockholm.
- Howe, D. M. (1995). *Negation in early African American English*. Master's thesis, University of Ottawa.
- Howe, D. M. & Walker, J. A. (2000). Negation in Early African American English: A creole diagnostic? In S. Poplack (Ed.), *The English history of African American English*. Oxford: Blackwell. 109-40.
- Huang, CTJ. (2003). The distribution of negative NPs and some typological correlates. In Y. Li & A. Simpson (Eds.), *Functional structure(s), form and interpretation*. New York: Routledge. 264-280.
- Kayne, R. S. (1998). Overt vs. covert movements. *Syntax*, 1(2), 128-191.
- Labov, W. (1972). Negative attraction and negative concord in English grammar. *Language*, 48. 773-818.
- Lasnik, H. (2001). A note on the EPP. *Linguistic Inquiry*, 32(2), 356-362.
- Pollock, J. Y. (1989). Verb movement, universal grammar, and the structure of IP. *Linguistic Inquiry*, 20(3), 365-424.
- Puskas, G. (2012). Licensing double negation in NC and non-NC languages. *Natural Language & Linguistic Theory*, 30(2), 611-649.
- Schneider, E. W. (1989). *American Earlier Black English: Morphological and Syntactic Variables*. Tuscaloosa: University of Alabama Press.
- Smith, J. (2001). Negative concord in the Old and New World: Evidence from Scotland. *Language Variation and Change* 13(2):109-134.
- Wolfram, W. & Christian, D. (1976). *Appalachian speech*. Arlington, VA: Center for Applied Linguistics.
- Zanuttini, R. (1997). *Negation and clausal structure: A comparative study of Romance languages*. Oxford: Oxford University Press.

Zeijlstra, H. (2004). *Sentential negation and negative concord*. Netherlands Graduate School of Linguistics.