

# Remarks on negation in varieties of Scots\*

## Cambridge workshop on English dialects

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### 1 Introduction

- Goals of this paper:
  - to describe the key characteristics of negation in some varieties of Scots (= Scottish English)
  - to outline the issues that arise when one tries to pigeonhole microvariation
  - to sketch how a more complete empirical picture would test different theories
- In a nutshell, what we’re trying to describe the difference between standard English and Scots with respect to T-to-C when the auxiliary is combined with negation:

(1)	a.	He didnae like it.	Scots
	b.	He didn’t like it.	StE
(2)	a.	*Didnae he like it?	Scots
	b.	Didn’t he like it?	StE
- In what component of the grammar is the relevant distinction to be located? Some options:
  1. the inventory of functional projections: the features on functional heads in StE and Scots are distinct, giving rise to the relevant distinction (AKA a classical Borerian parameter)
  2. the inventory of parameters that come “from above,” i.e. of the CamCoS kind (macroparameters)
  3. morphology: language-specific morphological rules derive the relevant surface forms
- Typically facts like these would be accounted for in terms of option 1, i.e. a microparameter. We’ll see that stating such a microparameter is difficult, and other related analyses also encounter difficulties.
- We’ll sketch an alternative account which takes option 3: putting the variation in morphology. We do this in terms of the theory of variation in Adger and Smith (2010), according to which relations between heads in maximal projections are in effect morphological and the scope of morphological rules takes in phenomena typically attributed to syntax.
- We’ll conclude by considering the predictions that these different theories make for the broader microcomparative picture in English dialects, to be filled in by future work.

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## 2 *no* and *-nae*

### 2.1 Some basic facts

- Scots dialects typically have two ways of expressing clausal negation: *no*, which occurs as a prosodically independent word, and *-nae*, which always attaches to the aux in T.

- (3) a. He didnae like it.  
b. Did he no like it?

- In most dialects (the ones we've looked at so far), *nae* never occurs independently, cannot be stressed and cannot be used for constituent negation; *no* can do all these things.

- (4) a. \*Are you nae coming?  
b. \*You shouldNAE reply.  
c. \*You should have nae bothered to reply. Scots, Glasgow

- (5) a. Are you no coming?  
b. You should NO reply.  
c. You should have no bothered to reply. Scots, Glasgow

- Something that sounds like *nae* also shows up as the negative determiner in NegDPs in Glasgow Scots. But this is likely to be accidental homophony rather than the same lexical item. They're phonetically distinct in e.g. Buckie Scots.

- (6) a. I've got nae money.  
b. Nae dugs are allowed in there. Scots, Glasgow

- (7) a. I did-[na] leave.  
b. I've got [ne] money. Scots, Buckie

- Similarly in StE varieties, we see accidental homophony between neg answer word *no* and NegDP determiner; cf. Scots again, where neg answer is distinct from NegD and all other neg words:

- (8) a. I've [no] money.  
b. [no], I'm fine. StE

- (9) a. Naw I'm fine.  
b. I've got {\*naw / nae} money. Scots, Glasgow

- *no* cannot sit unstressed next to an uncliticized aux, unlike StE *not*:

- (10) a. \*You are no leaving. Scots  
b. You are not leaving. StE

- *no* needs to be stressed in such a context. *no* and *-nae* generally in complementary distribution.

- *no* can occur unstressed wherever *-nae* is impossible: when aux moves to C, when an adverb intervenes (but adv neg scope is required), when the aux is enclitic upon the subject:

- (11) a. Are you no leaving?  
b. \*Arenae you leaving?

- (12) a. You should probably no leave now.  
 b. \*You should probably nae leave now.

- (13) a. I've no left yet.  
 b. \*I'venae left yet.<sup>1</sup>

Scots, Glasgow

- *no* used for constituent negation, as such can be iterated and co-occur with *-nae* and *no*. Unambiguous constituent negation *no* need not be stressed.

- (14) a. John shouldnae no leave  
 b. \*John should no no leave cf. (10a)  
 c. \*John should no NO leave cf. (10a)  
 d. John should NO no leave

Scots, Glasgow

- So *no* has wider distribution, and is impossible whenever *-nae* is possible and it is unambiguously clausal negation.
- Possible temptation: maybe all cases of *no* are constituent negation? But it can be v. high, e.g. in stripping, in *whether or not*, maybe all places where StE *no* can go.

- (15) a. They should've sent *me* a letter, no Tam.  
 b. I'm coming whether you like it or no.  
 c. It doesnae matter whether or no you like it.

- Some tests for constituent negation from Iatridou (1990) and Potsdam (1996) show that *no* is not always constituent negation. First (due to Jim McCloskey, in Potsdam 1996), constituent negation doesn't license NPIs in time adverbials.

- (16) a. John has not been playing football for any great length of time.  
 b. \*John has been not playing football for any great length of time.

- With *no*, NPIs are fine in this configuration, unless it's constituent negation (NB the NP in Scots measure phrases doesn't show agreement):

- (17) a. John's no been playin fitbaw for enhin like five year  
 b. \*John's been no playin fitbaw for enhin like five year  
 c. cf. John's been no playin fitbaw for suhin like five year

Glasgow Scots

- Second, *because* adjuncts interact scopally with sentential negation to get two readings corresponding to different adjunction positions (one in the scope of negation, one outside it), but constituent negation only gets one reading i.e. outside the scope of negation (Iatridou 1990).

- (18) Marion hasn't been selling drugs because the demand has changed.  
 a. Marion hasn't been selling drugs and the reason is that the demand has changed  
*because* >  $\neg$   
 b. Marion has been selling drugs but not for the reason that the demand has changed.  
 $\neg$  > *because*

- (19) Marion has been not selling drugs because the demand has changed.

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<sup>1</sup>More on related data below.

- a. Marion hasn't been selling drugs and the reason is that the demand has changed *because* >  $\neg$
- b. \*Marion has been selling drugs but not for the reason that the demand has changed.  $\neg$  > *because*

- With *no*, both readings are available, unless it's low.

(20) Tam's no been sellin gear cos he lost his day-joab

- a. Tam hasn't been selling drugs and the reason is that he lost his day-job. *because* >  $\neg$
- b. Tam has been selling drugs but not for the reason that he lost his day-job.  $\neg$  > *because*

(21) Tam's been no sellin gear cos he lost his day-joab

- a. Tam hasn't been selling drugs and the reason is that he lost his day-job. *because* >  $\neg$
- b. \*Tam has been selling drugs but not for the reason that he lost his day-job.  $\neg$  > *because*

- Thus *no* is surely an instance of sentential negation, not just constituent negation.
- Finally, *nae* can occur in one context where *no* is impossible: unstressed attached to aux, in negative imperatives (in some dialects). This will be important later.

(22) a. Dinnae leave! Scots, Tayside and northeast  
 b. \*Dae no leave Scots, most dialects

- *Dinnae* can also occur with full subject

(23) Dinnae you talk back to me!

## 2.2 One neg head or two?

- It's tempting to conclude that *-nae* and *no* are different realisation of the same Neg projection in different contexts, *-nae* in T, *no* elsewhere. Neg obligatory combines with T when they are adjacent.
- The obligatoriness of *nae* would be hard to capture if these were simply different heads that are merged in different positions. We would need to appeal to some sort of cumbersome blocking effect which prevented merging *NoP* when *naeP* could be merged. Since whether or not one or the other works is conditioned by PF factors, this would be a strange blocking effect.
- BUT Cormack and Smith (2012) argue that *nae* and *no* are different heads on basis of scope data.

“Scottish English ... has distinct negation items which correspond to Pol NOT and Adv NOT items, *-nae*, and *no*, respectively. However, the stressed Pol NOT may also be realised in the free form *no* ... We suggest then that in these Scottish English dialects *no* may realise either isolate Pol NOT or Echo NOT as well as Adv NOT, but that the *-nae* forms are exclusively Echo NOT.”

- Basically, they propose that the two realisations of negation are instances of two different neg heads that they posit in the English clausal spine (like in Cormack and Smith 2000, 2002, cf. Zanuttini 1997 on Italian), both below are T (unlike e.g. Holmberg 2013, where one is above T in the left periphery).
- The higher one is “Echo NOT,” the lower one “Pol NOT,” and there's also constituent negation “Adv NOT.” *-nae* realises Echo NOT exclusively, *no* can realise any of them.

- Motivation beyond morphology: scopal interaction with modals. It's claimed *-nae*, the higher head, always scopes over *could*, whereas *no* scopes under it unless stressed.

- (24) a. He couldnae have told him      NEG > POSS  
 b. He could no have told him      POSS > NEG  
 c. He could NO have told him      NEG > POSS

- First, in most dialects (all?) (b) is bad without stress on *no*, so it's not clear what distinguishes (b) and (c); it seems likely that it's contrastive focus; if so, this would explain the scope facts.
- Second, it's not even clear that *-nae* can't scope under modals. Cormack and Smith set up the following contexts to tease the different readings out of StE *n't*, where (26) uses declarative syntax but has a questioning interpretation and requires questioning intonation.

- (25) Teenager: I'm going out.  
 Mother: You shouldn't go out until you've done your homework, should you. SHOULD > NEG

- (26) Teenager: I'm going out.  
 Mother: You shouldn't do your homework first, should you?      NEG > SHOULD

- Same results in Glasgow Scots; there's little difference between (26) and (28) (both slightly marginal).

- (27) Teenager: I'm going out.  
 Mother: Ye shouldnae go out until you've done yer homework, should you.  
 SHOULD > NEG      Scots, Glasgow

- (28) Teenager: I'm going out.  
 Mother: Ye shouldnae dae yer homework first, should ye then?  
 NEG > SHOULD      Scots, Glasgow

- Other contexts with embedded modals tease out this reading:

- (29) They tell me John hastae leave, but he shouldnae huvtae!  
 SHOULD > NEG > HAVE TO      Scots, Glasgow

- Thus the scope argument for two distinct projections isn't convincing.

### 3 *nae* and *n't*

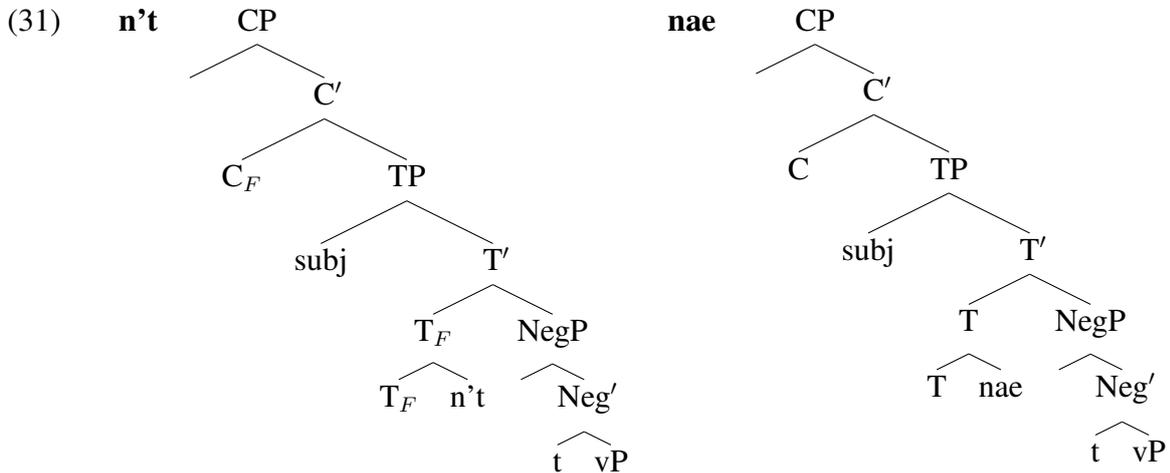
- At first blush, it looks like *nae* is basically a Scots variant of *n't*. One substantial difference: combining Neg with T is obligatory when possible with *no/nae* but optional with *n't/not*.
- The other key difference: T-to-C in interrogatives etc.

- (30) a. \*Didnae he like it?      Scots  
 b. Didn't he like it?      StE

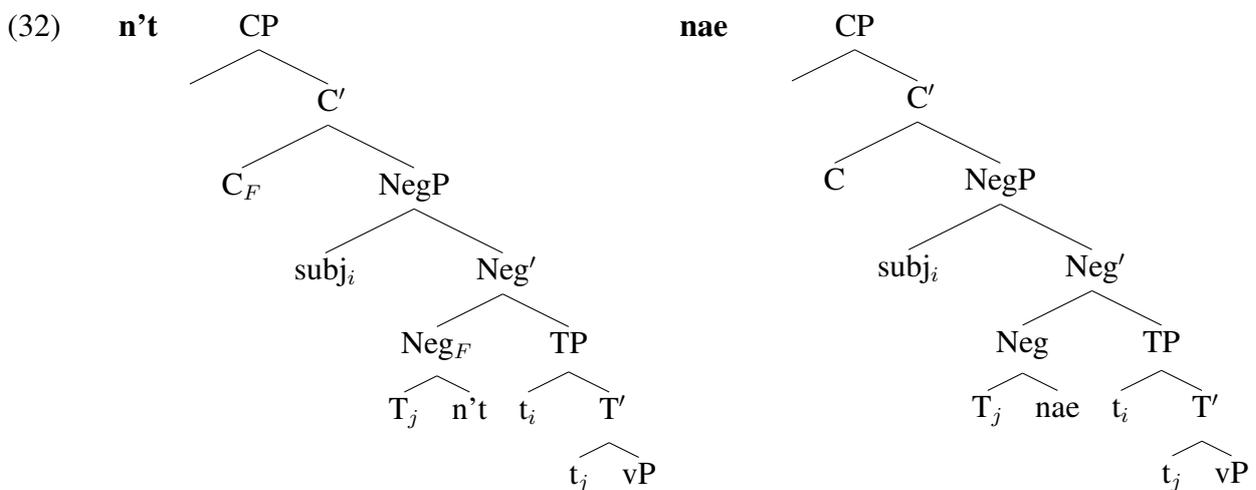
- How can we describe this microvariation?

### 3.1 Features driving movement

- A traditional explanation: relativize features on heads to derive different movement patterns. Usual form of explanation: head X can attract Y but not Z, due to variation in feature content of X,Y and Z.
- Tricky here because the element that conditions the availability of T-to-C is not the probed head T, but something that has attached to T. Move/Attract doesn't usually care for such non-local dependencies.
- For *n't* and *nae*, we'd have to say a feature F on C attracts a T hosting *n't* but not one hosting *nae*.



- **Problem 1:** what would the difference be? Usually whether or not a given goal moves is driven by uninterpretable features on the probe, i.e. an EPP feature or some such technology; the difference could not be this, as the C heads are still probing as usual (cf. positive variants).
- As for features on the goal, there are no obvious candidates for interpretable feature which would differ between *n't* and *nae*, as they're the same head semantically.
- **Problem 2,** more serious: how can C be selective about whether or not it finds T depending upon what is attached to it? This selectiveness is not recognisable as a general condition on movement.
- One potential solution: put NegP above T and raise T to affix to Neg head, with subject in Spec,NegP. Probe then sees the Neg head and feature relativization can work.



- But this misses the point of most work on negation, verb placement since Pollock (1989): whether or not the finite verb occurs to the left of negation (full or reduced/affixed) is conditioned by features in

Infl (finiteness, agreement etc) and theories explain variable verb placement in terms of features on T interacting with other properties of verbs.

- Problem 3: all of these solutions would have little to say about the difference between *n't* and *nae* w.r.t. obligatory combination with T, though it would be compatible with a separately stated rule.
- **Problem 4:** these theories would also struggle to account for the difference between inversion in interrogatives and imperatives.

(33) a. Dinnae you leave!  
 b. \*Dinnae you leave? Scots, Fife and Dundee

- One might relativize the features, saying that  $C_{int}$  only attracts a subset of T/Neg heads, whereas  $C_{imp}$  attracts all T/Neg. But this is unexpected given that imperatives are often not inclined to host negation, as shown by the ban on negative imperatives in many languages (see e.g. Zeijlstra 2013).
- Or one might deny that negative inversion involve T-to-C (cf. Rupp 1999). More on this later.
- One final permutation: we could say that the Cs in StE and Scots are fundamentally different, in that Scots C simply cannot host negation.
- But we see other negative forms can occur in C, not just in imperatives but in tags and exclamatives too. More on these later but a quick preview:

(34) a. He liked it, dint he?  
 b. They've heft, hint they?  
 c. They wur leavin, wint they? Scots, Glasgow

(35) a. Int/\*isnae it just a cracker of a day.  
 b. Hint/\*hasnae she just got an amazin wee voice.  
 c. Wint/\*wisnae it just a cracker of a day. Scots, Glasgow

- The latter two involve semantically bleached negations, so the variation in what can occur in C might be related at least partly to their different properties. But imperatives don't fit this picture, and it seems unlikely that the difference between Scots and English is going to get a semantic explanation.
- **In summary:** it's hard to describe the difference between *n't* and *nae* by standard feature relativization means, at least without invoking a bunch of undesirable stipulations.

### 3.2 Clitic vs affix

- Weir (2007): *nae* is a clitic but *n't* is an affix, in Zwicky and Pullum's (1983, Z&P) terms.
- Z&P identify six diagnostics for distinguishing clitics and affixes:
  - **A.** Clitics can exhibit a low degree of selection with respect to their hosts, while affixes exhibit a high degree of selection with respect to their stems.
  - **B.** Arbitrary gaps in the set of combinations are more characteristic of affixed words than of clitic groups
  - **C.** Morphophonological idiosyncrasies are more characteristic of affixed words than of clitic groups
  - **D.** Semantic idiosyncrasies are more characteristic of affixed words than of clitic groups

- E. Syntactic rules can affect affixed words, but cannot affect clitic groups
  - F. Clitics can attach to material already containing clitics, but affixes cannot
- Z&P argue that these criteria diagnose StE *n't* as an affix, not a clitic as it is often described.
  - Weir argues that these criteria distinguish *nae* (sometimes seen as *na* in eastern dialect) as a clitic, whereas *n't* is an affix.
  - On certain conceptions of cliticization, this may account for these difference w.r.t. inversion, i.e. if cliticization of this kind is a PF-rule: it wouldn't feed syntactic movement and hence would account for the inversion facts.
  - This account could be taken to be representative of the move to reduce the difference to rule ordering.

### 3.2.1 Z&P's criteria applied to *n't*

- **Criterion A.** clitics: low degree of selection with respect to their hosts, i.e. can attach to most things; cf. affixes which are highly selective (e.g. Fabb 1988). *n't* only attached to finite auxiliaries, not lexical verbs, non-finite auxes or other elements.

(36) a. \*John knowsn't the answer.  
b. John couldn't know the answer.

(37) a. \*I expect himn't to bother.  
b. I expect him not to bother.

- Compare e.g. reduced aux 's, which Z&P call an unambiguous clitic.

(38) a. John's going to be angry.  
b. The drive home tonight's going to be really easy.

- But it's not clear that the "selectivity" of *n't* is due to its affixhood rather than the fact that the head that realises *n't* only occurs close to finite T, a fact that can be captured by selection of either a clitic or affix-based projection only in the finite IP-field.

- And clitic 's is also selective, i.e. it only attached to DP subjects.

(39) a. Tommy really has been a trooper throughout this.  
b. \*Tommy really's been a trooper throughout this.

(40) a. Who did you say has the best chance of winning?  
b. \*Who did you say's the best chance of winning?

- **Criterion B.** Affixes show arbitrary gaps in the set of combinations more than clitics do. With *n't* we have the \**amn't* gap and \**mayn't*.

a.	do	[du]	don't	[dɒnt]
b.	does	[dʌz]	doesn't	[dʌznt]
c.	did	[dɪd]	didn't	[dɪdnt]
d.	have	[hæv]	haven't	[hævnt]
e.	has	[hæz]	hasn't	[hæznt]
f.	had	[hæd]	hadn't	[hædnt]
g.	can	[kæn]	{cannot can't	{kænat kænt}
h.	could	[kʊd]	couldn't	[kʊdnt]
i.	may	[me]	—	—
j.	might	[maɪt]	mightn't	[maɪnt]
k.	shall	[ʃæl]	shan't	[ʃænt]
l.	should	[ʃʊd]	shouldn't	[ʃʊdnt]
m.	will	[wɪl]	won't	[wɒnt]
n.	would	[wʊd]	wouldn't	[wʊdnt]
o.	dare	[deɪ]	daren't	[deɪnt]
p.	must	[mʌst]	mustn't	[mʌznt]
q.	need	[ni:d]	needn't	[ni:dnt]
r.	ought	[ɔ:t]	oughtn't	[ɔ:tnt]
s.	am	[æm]	—	—
t.	are	[ɑ:]	aren't	[ɑ:nt]
u.	is	[ɪz]	isn't	[ɪznt]
v.	was	[wʌz]	wasn't	[wʌznt]
w.	were	[wɛ]	weren't	[wɛnt]
x.	—	—	ain't	[eɪnt]

TABLE 1.

(Z&P: 508)

- Clitics claimed not to show arbitrary gaps. They do fall into gaps though, such as with PCC; it just so happens that we understand the arbitrariness of syntax in those cases.
- Maybe we just don't understand the apparently arbitrary gaps in the *n't* paradigm yet? Some people claim to understand the *amn't* gap, for instance (more on this another time).
- **Criterion C.** Affixes show morphophonological idiosyncrasies more than clitics. For *n't* in table 1 Z&P claim there are six forms not derived by regular phonological rules: *ain't*, *won't*, *don't*, *can't*, *shan't*, *mustn't* (see table).
- Z&P describe how these don't follow from regular rules. However they avail themselves of data from distinct dialects – *shan't* and *ain't* seldom co-exist in a single synchronic grammar – so this skews the picture. What are the criteria for choosing dialect forms to factor into the figures here? (i.e. why not include the many speakers who say *mayn't* or *amn't*).
- There's no baseline for clitics here. Is 24% a high rate of idiosyncratic forms compared to clitics?
- **Criterion D.** Semantic idiosyncrasies are more characteristic of affixes. The evidence for this with *n't* is the apparently idiosyncratic behaviour of combinations with modals.
- But we've seen already that this data isn't always clear-cut (i.e. *couldn't* can have not>can scope in some circumstances), and moreover there are theories available which account for the idiosyncrasies (e.g. Iatridou and Zeijlstra 2013). In addition, idiosyncrasies with affixation usually opacity of meaning, rather than non-systematic scope (cf. the Mirror Principle).
- Again no baseline is given for clitics. This picture could be complicated significantly if incorporation and cliticization were given broadly similar analyses (e.g. Roberts 2010).
- **Criterion E.** Affixation feeds syntax while cliticization does not. Thus Z&P say *n't* is distinguished from clitic auxes in this respect in e.g. T-to-C in polar questions.

- (41) a. I haven't been there.  
b. Haven't you been there?

- (42) a. You could've been there.  
 b. \*Could've you been there?

- But there are numerous cases where cliticization seems to feed movement. Some from French, where cliticization of the object or negation to the verb feeds V-to-C (Kayne 1983), cliticization of negation

- (43) L'as-tu fait?  
 it.have-you done  
 "Have you not done it?"

- (44) Pourquoi n'aimes tu pas les femmes?  
 why neg-like you neg the-PL women  
 "Why don't you like women?"

French

- Even with T-to-C, there are many dialects of English that allow T-to-C with cliticized auxiliaries, sometimes with doubling. Tends to be a lot better in T-to-C with *wh*-questions.

- (45) a. What should've we done?  
 b. What should've we have done? various nonstandard Englishes (inc Scots)

- Note also there are also cases where *n't* fails to feed T-to-C, e.g. conditional inversion (Pesetsky 1989), so the split is not a clean one.

- (46) a. Had I not done that, everything would have been fine.  
 b. \*Hadn't I done that, everything would have been fine.  
 c. If I had not done that, everything would have been fine.

StE

- **Criterion F.** Clitics attach outside clitics, affixes don't. *n't* can't attach to reduced auxiliaries, which Z&P take to be clitics, cf. other clitics. NB auxes can cliticize to *n't*.

- (47) a. I'd've been impressed by that.  
 b. \*I'dn't be so happy if I were you.  
 c. You wouldn't've been so impressed yesterday.

StE

- Conclusion: Z&P's criteria for distinguishing clitics and affixes are far from clear-cut, but if taken as decisive they could make *n't* out as an affix.

### 3.2.2 *nae* as a clitic

- Weir (2007) argues that Scots *na(e)* is diagnosed as a clitic by Z&P's criteria.
- **Criterion A.** degree of selectiveness doesn't actually support this, as Weir admits. As noted above, *nae* attaches to T only, just like *n't*. Note that the two track each other in their failures to attach to certain aux-like elements.

- (48) a. You better not leave.  
 b. You better no leave.  
 c. \*You bettern't leave.  
 d. \*Ye betternae leave.

StE  
 Scots  
 StE  
 Scots

- **Criterion B.** Arbitrary gaps: unlike StE *n't*, Scots *nae* has no arbitrary gaps, claims Weir.

English	Scots affirmative	Pronunciation	Scots negative	Pronunciation
do	dae	[de]	dinna; di'	[dme]; [de]
does	dis	[dɪz]	disna	[dɪzne]
did	did	[dɪd]	didna	[dɪdne]
have	hiv, hae	[hɪv, he]	hivna, hinna	[hɪvne, hme]
has	haes	[hɪz, haz]	haesna	[hɪzne, hazne]
had	haed	[hɪd, hʌd, had]	haedna	[hɪdne, hʌdne, hadne]
can	can	[kʌn]	canna	[kʌne]
could	cuid	[kɪd, kud]	cuidna	[kɪdne, kudne]
may	—	—	—	—
might	micht	[mɪxt]	—	—
shall	sall	[sal]	sallna	[salne]
should	shuid	[ʃɪd, ʃud]	shuidna	[ʃɪdne, ʃudne]
will	will	[wɪl]	willna, winna	[wɪlne, wme]
would	wad	[wad, wɪd]	wadna	[wadne, wɪdne]
dare	daur	[dar, dɔr]	daurna	[darne, dɔrne]
must (obligation)	maun	[man, mɔn, mɪn]	maunna	[manne, mɔne, mɪne]
must ("I conclude that")	must	[mʌst]	?mustna	[mʌstne]
need	—	—	—	—
ought	—	—	—	—
am	am	[am]	amna	[amne]
are	ar	[ar]	arna	[arne]
is	is	[ɪz]	isna	[ɪzne]
was	wis	[wɪz]	wisna	[wɪzne]
were	war	[war, wʌr]	warna	[warne, wʌrne]
"ain't"	—	—	—	—

(Weir 2007, 10, based on data in Miller 2003, 89-90)

All auxes return a *nae* form, with no *amn't* gap; *mayn't* isn't attested as *may* is not in the dialect examined.

- Weir reports that *michtna* (*michtn't*) is missing from his own dialect and that of his Dundee Scots informants; he notes that *michtn't* is also missing from his idiolect, but not for his informants. Thus this is an arbitrary gap, indicating this criteria does not necessarily diagnose *na(e)* as a clitic either, at least compared to *n't*.
- **Criterion C.** Morphophonological irregularities: far fewer in Scots than with StE *n't*. Most changes are vowel changes attributable to the Scottish Vowel Length Rule, irregular StE ones are regular here: *willna* vs. *won't*, *dinna* vs. *don't*.
- **Criterion D.** Semantic idiosyncrasies: no idiosyncrasies of note to report. In effect, the scopal behaviour of *nae* is the same as *n't*, so the two aren't distinguished this way.
- **Criterion E.** Feeding syntax. This is clearly supported by the data from inversion, and it distinguishes StE *n't* from Scots *nae*. The one apparent exception is from negative imperatives.

- (49) a. \*Didnae he like it? Scots  
 b. Didn't he like it? StE

- (50) a. \*Why didnae ye like it? Scots  
 b. Why didn't you like it? StE
- (51) Dinnae you leave! Scots, east

- Weir argues that negative imperatives don't involve inversion: the *don't/dinnae* are unitary heads base-generated in the left periphery (cf. Zanuttini 1996). This is defended in detail in Weir (2013).
- **Criterion F.** Clitics attaching to other clitics. Weir notes that *na(e)* can attach to cliticized auxiliaries in his informants' dialects (while he finds it marginal), unlike with StE *n't*.

- (52) a. \*I'dn't wanted to go but he convinced me. StE  
 b. (?)A'dna wantit tae gang but he convinced me. Scots, Dundee

- Weir argues that, taken together, these argue for diagnosing *na(e)* as a clitic.

### 3.2.3 Problems

- Of the four clitic-hood criteria which *nae* fulfills, at least two are undermined directly by consideration of the wider typology of Scots negation.
- **Criterion B:** accidental gaps. Dundee Scots only has one or two accidental gaps with modals (maybe to be accounted for as semantic anomalies) but it doesn't have any surprising ones like the *amn't* gap.
- But Glasgow/west coast Scots does: the *dinnae* gap. While east coast dialects have *dinnae* for *dae+nae*, Glasgow Scots has no such version (it's often taken as a shibboleth for people from the east coast), even though it is productive otherwise. Unused modals *dare*, *need*, *ought*, *shall*, *may*, *must* (*deontic*) omitted.

StE aux	Glasgow Scots aux	Pronunciation	Glasgow Scots negative	Pronunciation
do	dae	[de]	<b>*dinnae</b>	
does	dis	[dɪz]	disnae	[dɪzne]
did	did	[dɪd]	didnae	[dɪdne]
have	huv	[hʌv]	huvnae	[hʌvne]
had	hud	[hʌd]	hudnae	[hʌdne]
can	kin	[kɪn]	cannae	[kæne]
could	could/kid	[kɪd, kud]	couldnae	[kudne]
might	might	[meɪt]	<b>*mightnae</b>	–
should	should/shid	[ʃud, ʃɪd]	shouldnae	[ʃudne]
will	will	[wɪl, wʌl]	willnae	[wɪlne, wʌlne]
would	would/wid	[wud, wɪd]	wouldnae/widnae	[wudne, wɪdne]
must (epist)	must	[mʌst]	<b>*mustnae</b>	–
am	um	[ʌm]	umnae	[ʌmne]
are	ur	[ʌr]	urnae	[ʌrne]
is	is	[ɪz]	isnae	[ɪzne]
was	wis	[wɪz]	wisnae	[wɪzne]

**Table 3**

- This is very similar to the *amn't* gap in its (apparent) arbitrariness. *mustnae* and *mightnae* are also missing but these are less surprising.
- If arbitrary gaps diagnose *n't* as an affix, they do the same for *nae* in Glasgow Scots.

- **Criterion C.** There are indeed fewer phonological idiosyncrasies with Scots, but whether the different proportions are telling is far from clear-cut. Moreover they change when we look at Glasgow Scots, which has [kɪn] → [kæne] *canna*, [ʃɪd] → [ʃudne] *shouldnae* (for some speakers). These are no less surprising than the StE variants.
- **Criterion D.** This didn't argue for the cliticness of *nae* so it's irrelevant.
- **Criterion E.** The results are same in Glasgow Scots, i.e. inversion is also impossible, *but* Brown and Millar (1980) suggest that the ban on inversion is not observed in all dialects: "such inverted interrogative forms with *nae* ... can still be found in some rural dialects of Scots" (p. 113)
- Brown and Miller offer no actual data or locations, so this is hard to verify. But it is an open question that a complete typology could allow us to answer. If this is true, does the *nae* in these inverting dialects share some or all of the characteristics described here?
- Note that Glasgow Scots lacks negative imperatives due to the *dinnae* gap (speakers offer circumlocutions or StE versions *don't*), so it can't speak to this data point.

- (53) a. \*Dinnae (you) talk pish!  
 b. \*Dinnae leave just yet!  
 c. [Hankamer brandishes cleaver] \*Dinnae! Scots, Glasgow

- It's unlikely that the *dinnae* gap is due to phonological factors, not just because it's possible in related dialects, but also because it is possible for some speakers in frozen expressions, like *dinnae fret*.
- **Criterion F.** Weir only offers one case, judged marginal by some, where *nae* can attach to a cliticized aux. It's not clear that the eastern dialect he investigates allow it in all contexts.
- This is clearly variable across dialects and different instantiations, indicating a PF-based explanation. In Glasgow Scots, attaching to a clitic is utterly impossible in most cases:

- (54) a. \*A'vnae left.  
 b. A huvnae left.  
 c. A'v no left "I haven't left"

- (55) a. \*A'mnae leavin  
 b. A umnae leavin  
 c. A'm no leavin "I'm not leaving"

- (56) a. \*Y'urnae leavin  
 b. Ye urnae leavin  
 c. Y'ur no leavin "You're not leaving"

- (57) a. \*Shesnae leavin  
 b. She isnae leavin  
 c. She's no leavin "She's not leaving" Glasgow Scots

- One apparent counterexample: in some Glasgow dialects (southeast and some areas of South Lanarkshire at least), a variant of the cliticized form of *be* inflected for 1st person shows up with *nae*. This typically occurs in emphatic polarity contexts, and it can occur without negation.

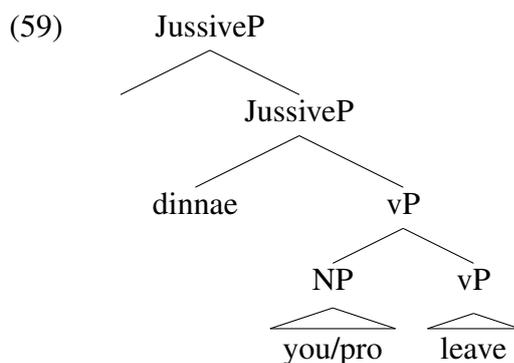
- (58) a. Naw [amʌrne]. "No I'm not"  
 b. Aye [amʌr]. "Yes I am" Scots, southeast Glasgow

- The aux form here seems to decompose into *am* – 1st person pronoun with inflected *be* attached – and *ur* – 2nd person inflected form of *be*.
- This can be analysed as a doubling structure: the *ur* is a spellout of a lower copy of the raised auxiliary as the less specified [+participant,+singular] form (i.e. 2nd person), as opposed to the fully specified [+author,+participant,+singular]. This is startlingly similar to the rescue strategy invoked for the *amn't* gap in StE, where *aren't* is used for *amn't*.
- Lots more to be said, but upshot here: *amurnae* doesn't involve attaching *nae* to cliticized *am*, but rather to the *lower* instantiation *ur*. So not a counterexample, but rather an indicator that the conditions on cliticization are likely to be phonological.
- **In summary:** while Weir's way has some initial promise, when we look at the wider typology of Scots dialects the analysis of *nae* as clitic rather than affix seems to come apart. It doesn't seem to be possible to say that some dialects have clitic *nae* and others affix *nae*, since they all seem to share characteristics in common; the picture needs to be filled in, and this shows the benefit of doing so.
- Thus, it's not going to do to say that the difference between *nae* and *n't* reduced to clitic vs. affix.

## 4 The 'lexical' nature of the distribution of C+neg in Scots

### 4.1 More on negative imperatives: *dinnae* as a Jussive head

- The facts from negative imperatives in (east coast) Scots are significant since they seem to indicate that the ban on inversion with *nae* is lifted just in one context, complicating the picture substantially.
- Weir (2007, 2013) takes a different view: *dinnae* (and *don't* and *let's*) is a single complex head that is base-generated in its surface position as the head of a JussiveP, which encodes the imperative semantics (adapting Zanuttini 2008).



- Makes the imperative data less problematic and the feature relativization analysis more viable.
- Weir only presents one direct argument in favour of (59): it makes sense of the inversion facts. But it's this very restriction that we're looking to analyse here.
- A less direct argument: it makes sense of the fact that *do(n't)* co-occurs with *be* (at least with a specific theory of *do*-support).

- (60)
- Don't be late!
  - Have finished your homework by ten!

StE

- Another indirect argument: there seems to be motivation for a Jussive head from elsewhere in Scots, the head *gonnae* (grammaticalized from reduced *are you going to*). *Gonnae* sentences have the semantics of imperatives with weaker force (i.e. less impolite).

- (61) a. *Gonnae* leave me alain! “will you please leave me alone”  
 b. *Gonnae* no dae that! “will you please not do that”  
 c. *Gonnae* you shut up! “will you please shut up” Scots

- Similar to *let's*, also a candidate for an overt realization of Jussive.

- (62) a. Let's you and me discuss this more later.  
 b. Let's leave! Scots / StE

- If this is taken to indicate that it's plausible to propose an imperative-specific complementizer (= head in left periphery), it should be plausible to analyse *dinnae/don't* as a realization of such a head.
- Note that other languages have imperative-specific (negative) complementizers. Scottish Gaelic expresses negation with negative complementizers: the C-neg in declaratives is distinct from the one in interrogatives, and the one in imperatives is different still.

- (63) Cha deach mi a Ghlaschu.  
 C-NEG go-PST I to Glasgow  
 “I didn't go to Glasgow”

- (64) Nach deach thu a Ghlaschu?  
 C-NEG-INT go-PST you to Glasgow  
 “Didn't you go to Glasgow?”

- (65) Na rach a Ghlaschu!  
 C-NEG-IMP go to Glasgow  
 “Don't go to Glasgow!”

## 4.2 Problems

- Main problem with (59): it dismisses the good arguments in Potsdam (1996) for analysing imperatives as regular CPs, with the subject in Spec,TP, inversion created by optional T-to-C.
- One argument from Potsdam: the position of S-adverbs. In regular clauses these can occur between the subject and the aux or after the aux but not initially, i.e. adjoined to IP.

- (66) a. He simply is incapable of it.  
 b. \*Simply he is incapable of it.  
 c. He is simply incapable of it. StE

- With T-to-C in questions, the adverb can be between aux and subject but not initially.

- (67) a. Couldn't they simply have become disoriented?  
 b. Couldn't they have simply become disoriented?  
 c. \*Simply couldn't they have become disoriented? StE

- Imperatives pattern with the inversion sentences:

- (68) a. Don't you simply/just stand there!  
 b. \*Simply/just don't you stand there!  
 c. \*Don't simply/just you stand there!

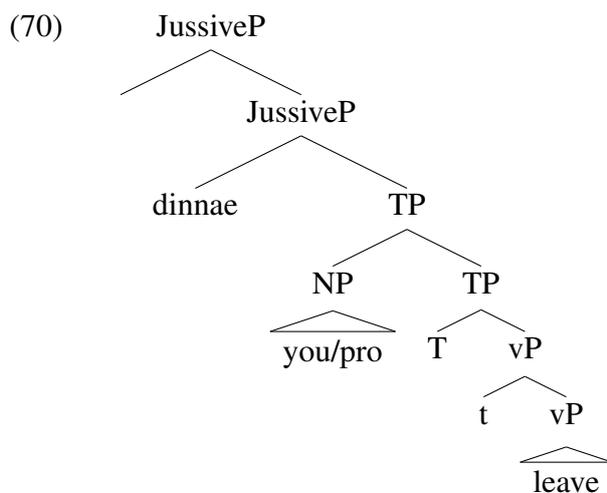
StE

- The same pattern holds with the relevant Scots dialects (using *just*):

- (69) a. Dinnae you just staun there!  
 b. \*Just dinnae you staun there!<sup>2</sup>  
 c. \*Dinnae just you staun there!

Scots, Fife

- These facts argue against having JussiveP dominating just a vP, as in (60), though not against base-generating *dinnae* high. If we alter the structure to include TP, these facts can be accounted for.



- Then we apparently run the risk of generating these:

- (71) a. Don't just don't talk to him!  
 b. Don't you don't move!

... which aren't actually bad...

- Another issue: *dinnae* can occur after the subject, just like *don't*:

- (72) a. ?A'body dinnae leave!  
 b. Everybody don't move!

Scots, Dundee

StE

- If *dinnae/don't* is a JussiveP head then these must be derived by topicalizing the subjects.
- This doesn't square well with the fact that universal QPs are generally resistant to topicalization, whereas they are exactly the elements that are particularly susceptible to appearing before *don't/dinnae*.

- (73) a. ??Every book, you should read.  
 b. ??Everyone, you shouldn't annoy.

- (74) \*Every book, don't read!

<sup>2</sup>This is bad on the reading that is similar to *simply*, but OK on the other reading.

- They're not pronounced like topicalizations in imperatives, which usually have the standard topicalization intonation break (Potsdam 1996).

(75) This book, give to Bob. That one, don't give to anybody!

- Regarding the argument from *gonnae* and *let's* for JussiveP, an important difference between these and *dinnae/don't* is that the subject cannot appear before them:

(76) a. \*You and me let's leave! StE  
 b. ?\*You gonnae leave!<sup>3</sup> Scots, Glasgow

(77) a. Let's nobody tell them where it is.  
 b. \*Nobody let's tell them where it is.

(78) a. Gonnae naebdy touch this! "Could no one please touch this"  
 b. \*Naebdy gonnae touch this! Scots, Glasgow

- These indicate that Jussive heads/Cs don't allow topicalization of the subject to a higher position (prob because topicalized subject → *that*-trace), as is required for the analysis of *dinnae/don't*. Thus a unified analysis seems unlikely, and hence the argument against inversion is undermined.
- Regarding (60), Potsdam attributes this to the fact that the non-finite auxiliaries in imperatives behave in imperatives as if they have not raised to T, on the basis of much evidence from adverb placement and ellipsis; if the auxiliaries don't raise to T, then *do* appears there.
- English used to have V-to-T for auxiliaries in imperatives, so this can be just understood as another aspect of the loss of verb movement in English (cf. Han 2000).

(79) Be not afeard; the isle is full of noises (*The Tempest* 3.2)

- The picture: imperatives are regular CPs dominating TPs with subject in Spec *dinnae/don't* can be in T but can occur in C as well (inversion), some Cs can host imperative-specific complementizers.

### 4.3 Towards a 'lexical' analysis?

- None of the above argues against JussiveP or some similar imperative-specific complementizer, so it's worth pausing to consider whether it has any promise, or indeed if it could be generalized.
- The form of the argument from Weir is this:
  - T-to-C with negation is not possible in most contexts in Scots
  - T-to-C is typically productive, so if it's not possible in some environments it's because it's not available as a rule in this language
  - inverted negative imperatives are possible in Scots
  - inversion in negative imperatives must be produced by insertion of some specific lexical item
- The reasoning here is that if the rule only applies in a small number of environments, that's because that environment employs a lexical item specific to it.

<sup>3</sup>This is interpretable as a reduced question (missing *are*) with the right intonation, but not as an imperative.

- But we could reverse the logic: “inversion” is possible in negative imperatives because the specific lexical item for C is available (i.e. Jussive = *dinnae*); no other such lexical items are available for the other environments so they lack “inversion.”
- This “lexical” analysis make some sense, since English also has some gaps in its inversion paradigm, not just with negated auxiliaries but indeed with specific auxiliaries too (though the latter may be systematic; see Pesetsky 1989).

(80) a. Had I not done that, everything would have been fine.  
 b. \*Hadn't I done that, everything would have been fine.  
 c. If I had not done that, everything would have been fine. StE

(81) a. Had John solved the problem, he would have shown up.  
 b. Should Mary meet him, she would certainly come and tell us.  
 c. Were John to solve the problem, we would be happy.  
 d. Were Mary dying, she would look worse.  
 e. \*Could Mary speak French, she would have shown up.  
 f. \*Were we to take out the garbage every day, they would have left us a note.  
     (on the reading “were we to” = “we were expected to...”)  
 g. \*Would John drive a little faster, he would get there a little sooner. StE

- Thus we could say inversion in questions requires the lexical item that would slot in just like Jussive does; call it NQuestion for neg questions, NCond for negated inverted conditionals

Functional lexicon of Scots: ✓Jussive = *dinnae*, \*NQuestion = *dinnae*, \*NCond = *dinnae*

Functional lexicon of StE: ✓Jussive = *don't*, ✓NQuestion = *don't*, \*NCond = *hadn't*, ✓Cond = *had*, \*Cond = *could...*

- This way of describing the facts is lent extra plausibility when we look at tags: in Glasgow Scots, negative tags seem to involve an invariant form *-int* combined with the onset of the lower auxiliary. Note that in the positive tags the usual form of the aux is in C.

(82)	a.	He liked it, dint he?	He didnae like it, did he?	<i>did / didn't</i>
	b.	He likes it, dint he?	He doesnae like it, does he?	<i>does / doesn't</i>
	c.	Ye like it, dint ye?	Ye don't like it, dae ye?	<i>do / don't</i>
	d.	He's bought it, hint he?	He hasnae bought it, has he?	<i>has / hasn't</i>
	e.	He'd left already, hint he?	He hadnae left already, had he?	<i>had / hadn't</i>
	f.	They've left, hint they?	They huvnae left, huv they?	<i>have / haven't</i>
	g.	He should leave it alain, shint he?	He shouldnae leave, shid he?	<i>should / shouldn't</i>
	h.	He would hate it, wint he?	He widnae hate it, wid he?	<i>would / wouldn't</i>
	i.	He'll hate it, wint he?	He willnae hate it, will he?	<i>will / won't</i>
	j.	He can leave, kint he?	He cannae leave, kin he?	<i>can / can't</i>
	k.	He's leavin, int he?	He isnae leavin, is he?	<i>is / isn't</i>
	l.	Yer leavin, int ye?	Ye urnae leavin, ur ye?	<i>are / aren't</i>
	m.	Am leavin, int a?	A umnae leavin, um a?	<i>am / -</i>
	n.	He wis leavin, wint he?	He wisnae leavin, wis he?	<i>was / wasn't</i>
	o.	They wur leavin, wint they?	They wurnae leavin, wur they?	<i>were / weren't</i>

Scots, Glasgow

- Many of the negative forms are distinct from the StE *n't* forms that occur in other inversion environments, and cannot be interchanged. Judgments are sharpened up by using Scots-specific lexicon:

- (83) a. \*Dint emdy like it? “Didn’t/doesn’t anyone like it?”  
 b. \*Hint ye got one?  
 c. \*Shint he be worried?  
 d. \*Wint he hate it?  
 e. \*Wint it a nice day? “Wasn’t it a nice day?”  
 f. \*Kint he have a go?  
 g. \*Int emdy coming? “Isn’t anybody coming?” Scots, Glasgow

- The only other environment where these forms work are in exclamatives (-*nae* is excluded here too).

- (84) a. Int/\*isnae it just a cracker of a day.  
 b. Hint/\*hasnae she just got an amazin wee voice.  
 c. Wint/\*wisnae it just a cracker of a day. Scots, Glasgow

- These show negation can be in C, but only when a relevant negative lexical item for C is available.
- Interestingly, not all dialects have the *-int* form, e.g. Fife Scots. For tags, Fife (and Edinburgh) Scots employs another invariant form: *e?* for positive tags, *eh no?* for negative, regardless of the form of the subject or aux of the host clause (Millar and Brown 1980).

- (85) a. He didnae like it, e?  
 b. He liked it, eh no? Scots, Fife and Edinburgh

- For exclamatives, the only option is low negation:

- (86) Is it no just a cracking day! Scots, Fife

- The broad picture with Scots: unlike StE, aux+neg can have different forms in different environments, and it can be restricted from occurring in some environments. This fits well with a lexical analysis, and one may propose that the same may apply to StE (which has a less patchy distribution and less diversity in morphological forms of negation).
- Of course the point of using T-to-C *movement* rather than base-generation of heads in C is that it explains the gap position in T, i.e. these aren’t generated.

- (87) a. (\*)Don’t you don’t leave!  
 b. \*Didn’t you didn’t leave?  
 c. \*Didn’t you haven’t left? StE

- Any “lexical” analysis would need to account for these facts as well. This is very tricky if we’re only just varying the form of a TP-selecting C, at least on traditional analyses. But there are ways to model this dependency with something like a lexical analysis.

## 5 An alternative: extended projections and ‘spans’

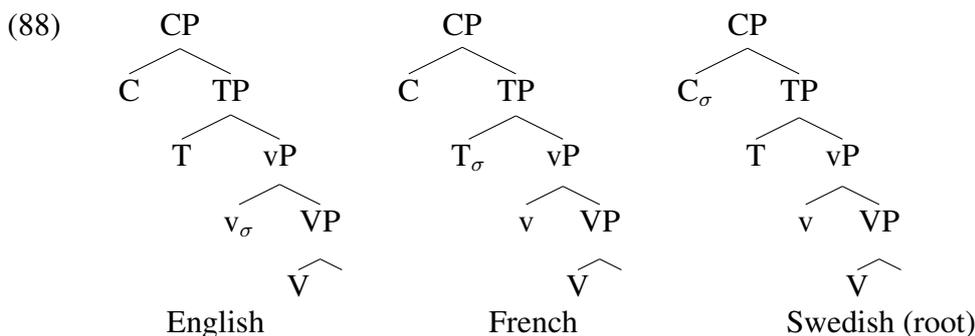
“Well if you’re so sure what it ain’t, how about tellin us what it am.” Moe Szyslak

- The main problem with the standard analysis of the Scots inversion data is that it requires us to describe head-to-head relations that hold non-locally: C seems to pay attention to the feature content of the negation below T, even though it probes for T.

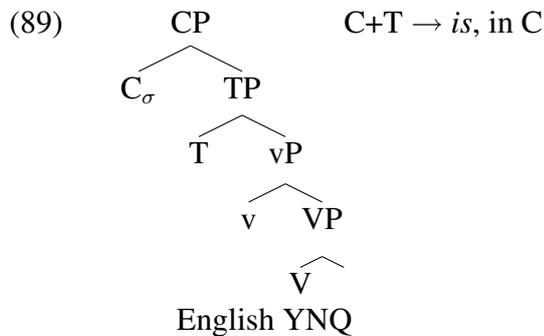
- The locality issue only arises when the relation between the head positions which we describe as “inversion” is derived syntactically by movement.
- But this is not the only way to relate consecutive heads in a structure. The theory of extended projections (Grimshaw 1991) combined with insights from Mirror Theory (Brody 2000) allows an alternative way of conceiving of these relations.
- This allows us to state morphological vocabulary insertion rules which make reference to whole ‘spans’ of extended projections (Svenonius 2012) which, in turn, allows us to describe the apparently non-local relations in question without running afoul of syntactic locality.

## 5.1 Spelling out ‘spans’

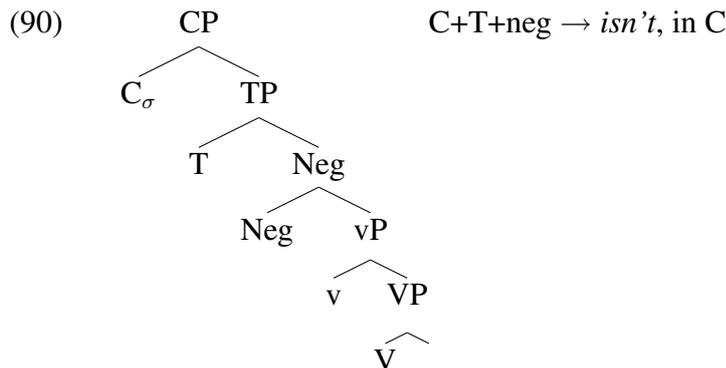
- The theory we adopt is one in Adger and Smith (2010) and Adger (2011, 2013). We won’t go into all the details but will concentrate on the details that are important to the core analysis. The components:
- Extended projections: the functional structure of a clause is taken to be an extended projection (EP) of the root category, i.e. the lexical verb.
- Each head in an EP may spell out individually, or (as is more common) some combinations, or ‘spans’ of the EP, may spell out as single units, e.g. V+v+T+Agr in Italian.
- Head positions: within a given extended projection, HM is not required to relate distinct positions; rather they are related by virtue of being in the same EP. So ‘spans’ don’t come about by successive-cyclic HM but simply associating the span with a specific morphological realisation (=spellout rule).
- Whether a span made up of X and Y is spelled out in X or Y is determined by which head bears a special diacritic (call it  $\sigma$ ) for marking the linear position for realization, equivalent to the EPP feature which drives overt head movement.
- This accounts for the fact that V can bear tense/agreement without necessarily appearing high in T (English, Scandinavian), a problem that needs affix hopping or lowering in most accounts. Thus the spellout diacritic is on v in English, on T in French on root C in V2 languages.



- The form and position of heads in an EP thus reduces to two factors: (i) the inventory (or lexicon) of spellout rules for different spans (including trivial one-node spans); (ii) the different positions for  $\sigma$ .
- Different EPs will have different spellout rules in a given language. Thus in English, an EP for a yes-no question will have  $\sigma$  on C; English lacks a spellout rule for C+T+v+V so “aux-to-T” is derived by a rule spelling out C+T in C.



- In a negative YNQ, Neg, which is part of the EP, may be lexicalised in C.



- Negation can always in principle occur in C (it's part of the EP of a negated clause), but whether it does in a language depends on whether there are spellout rules lexicalising it there.
- The key property of head placement rules: whether or not a given span can be spelled out (= HM possibility) is determined by the inventory/lexicon of spellout rules, and whether or not a given spellout rule exists may be determined by the *global properties of the chunk of structure* to be lexicalised.
- This is unlike the syntactic movement analysis, where relations between heads are constrained by locality (the non-local relation between C and Neg in effect in the inversion data is hard to model).

## 5.2 Describing inversion in Scots and English

- This approach to head positions allows us to describe the landscapes of inversion in Scots and StE by stating inventories of spellout rules which lexicalise the different possible C+T+neg combination.
- The lack of *nae* inversion is due to there not being a rule for spelling out C+T+Neg in C with
- StE: there's a rule for spelling out negation in C for all environments except conditionals:

(91)	a.	EP for $C_{interr}$ (YNQ, whQ):	$C_{interr}+T+Neg$	→ <i>aux+n't</i> in C
	b.	EP for $C_{imp}$ (inverted imperative):	$C_{imp}+T+Neg$	→ <i>don't</i> in C
	c.	EP for $C_{cond}$ (conditional inv):	$C_{cond}+T+Neg$	→ <i>aux +</i> in C
	d.	EP for $C_{tag}$ (tag question):	$C_{tag}+T+Neg$	→ <i>aux+n't</i> in C

- Neg is effectively in C in all cases, as it's part of the EP, but it's not spelled out there.
- The inventory is different for Scots: spellout rule does not realise neg in C overtly in interrogatives (except in Brown and Millar's "rural dialects"? we don't know), but it does in tags, exclamatives and imperatives (in some dialects).

(92)	a.	EP for $C_{interr}$ (YNQ, whQ):	$C_{interr}+T+Neg$	$\rightarrow$ aux in C	most dialects
	b.	EP for $C_{interr}$ (YNQ, whQ):	$C_{interr}+T+Neg$	$\rightarrow$ aux+ <i>nae</i> in C	rural dialects?
	c.	EP for $C_{imp}$ (inverted imper.):	$C_{imp}+T+Neg$	$\rightarrow$ <i>dinnae</i> in C	Fife, Dundee
	d.	EP for $C_{tag}$ (tag question):	$C_{tag}+T+Neg$	$\rightarrow$ aux(onset)+- <i>int</i> in C	Glasgow
	e.	EP for $C_{excl}$ (exclamative):	$C_{excl}+T+Neg$	$\rightarrow$ aux(onset)+- <i>int</i> in C	Glasgow

- Unlike StE, the different realisations of C+T+Neg have different morphological forms, varying across dialects in form/availability.
- Other rules for X+neg combinations can be stated in a similar fashion:

(93)	a.	Obligatory cliticization of <i>nae</i> :	T+Neg	$\rightarrow$ aux+ <i>nae</i> in T	
	b.	Cliticized aux:	T $\rightarrow$ 's/'ve/'ll/'d, Neg $\rightarrow$ <i>no</i>		Glasgow
	c.	Cliticized aux:	T(past)+Neg+have $\rightarrow$ 'd+ <i>na</i>		Dundee

- The descriptive tools are flexible, but the flexibility is warranted by the variety of the data.
- Plenty work to be done to take the description and indeed explanation further:
  - how does one lexicalisation come about and not another?
  - why do exclamatives and tags have the same form in C?
  - why does StE realise neg in C in the same way in almost all cases?

### 5.3 Loose ends

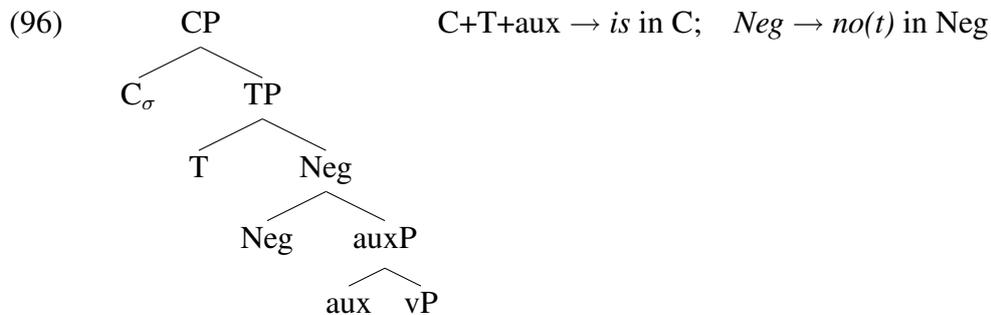
- Loose end #1: negation is always capable of scoping in C in this analysis; it just doesn't spell out there in some cases, a morphological fact. But then how come neg doesn't always scope high? e.g. NPI licensing (Kayne 2005, Roberts 2010).

(94)	a.	Which book didn't anyone read?	
	b.	*Which book did anyone not read?	StE

- The problem here isn't the same as the "head movement is PF movement" theories (critiqued in detail in Roberts 2010), since for such theories negation is always *low*. The proposed account of head position is also PF-based, but with negation always high. So the issue is (b), not (a).
- Proposal: negation can always potentially scope in C, but its scope is fixed by its surface position. This is in some way a restatement of the "surface structure" component of the NPI licensing condition, taken to be responsible for these:

(95) \*Anyone didn't see John.

- Loose end #2: how does negation spell out as *no(t)* when there's aux-inversion? This seems to require spelling out a C+T+aux span which "misses out" neg.



- This is ruled out by some implementations of mirror theory, a recapitulation of the HMC:



- This is the old HMC problem for the head movement account of V-neg order in another guise. It could be that we don't want the condition in (96), as excorporation does seem unavoidable and we want some analysis of the headiness of clitics (Roberts 1991).
- Mirror-theoretic analysis can't avail itself of a Relativized Minimality account like HM can, but it can more or less stick it in morphology: "features driving movement to Z are on X but not Y" (= RM in lexicon of features on FPs) is restated as "Z combines morphologically with X but not Y".
- Or we could be boring: *no(t)* is in Spec,Neg while *nae* expresses the Neg head, so there is no violation of (96) in relevant structures.
- Need to then say co-occurrence of overt head *nae* and spec *no* forbidden in general; this may be open to dialectal variation (to be continued).

## 6 Conclusion and outlook

- We've argued that the 'lexical' nature of the distribution of possible "inversion" structures in Scots (compared to StE) is best described by rules which make reference to the global structure of some part of the extended projection, something we could in an implementation of Mirror Theory.
- In doing this, we've argued that this theory gives us technology that is useful for describing English microvariation, effectively putting the variation in morphology (inventory of spellout rules).
- But maybe we're missing a lot: there could be syntactic conspiracies lurking in the wider typology which could tell us that morphology is the wrong place for this variation.
- Do exclamatives and tags pattern with other structures in other dialects? Do they always pattern together? Is there a syntactic explanation for the *amn't* and *dinnae* gaps?

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