

SLUICING AND PIED PIPING IN SCOTTISH GAELIC*

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Adger and Ramchand (2000) (henceforth A&R) propose that Scottish Gaelic has two strategies for creating *wh*-questions. Despite the fact that the Goidelic languages are often held up as evidence for successive cyclic A-bar movement, they claim that neither of these strategies involve classic A-bar movement through the specifier of CP. In this squib, I present some additional data from the behavior of sluicing in the language that supports part of A&R's analysis.

The first strategy proposed by A&R makes use of tools that are independently required for the creation of copular constructions in the language (see Adger and Ramchand 2003, Carnie 1995). They propose that *wh*-questions in the language are effectively clefts constructed from a copula, a *wh*-phrase 'subject' and a headless relative clause 'predicate'. Non-question clefts are constructed exactly along these lines. In (1a), we see a typical cleft structure:

- (1) a) 'Se am bocsa seo a chuir mi am peann ann
COP the box this C.REL put.PAST/REL I the pen in-3SM
"It's this box that I put the pen in."^[SEP] (A&R: e.g. 50)
b) [Cop [clefted item]][relative clause]]

*Many thanks, first of all, to David Pesetsky who was one of the key figures in shaping my syntactic education. From teaching my first syntax class at MIT to being a member of my dissertation committee to being an invaluable mentor and advisor in my later career, I owe David a lot. Thanks also to the editors of the volume for pulling this endeavor together. This particular squib relies heavily from data I gathered from my fabulous native speaker consultant and colleague Muriel Fisher, who is from the town of Glendale on Skye. I've discussed the data a couple of times with both David Adger and Jim McCloskey, both of whom have been very helpful in shaping the questions that need to be asked. The fact that the data here remains a puzzle certainly isn't their fault. The paper benefited greatly from comments by Seth Cable and an anonymous reviewer, who both raised some important observations, some of which I was able to address here but others will have to wait for future work. I've noted those areas which remain open questions below.

This is a copula *'Se* followed by the clefted DP *am bocsa seo* followed by a relative clause marked by the relative particle *a*. A&R claim that *wh*-questions are structured the same way. They claim that sentence (2) is essentially a cleft as well:

- (2) a) Dè am bocsa a chuir thu am peann ann?
 which the box C.REL put.PAST you the pen in.3SM
 “Which box did you put the pen in?”^[L]_[SEP] (A&R: e.g. 35)
 b) [Ø¹] [wh-phrase] [relative clause]

So, in essence, they claim that a *wh*-question means something closer to “it was which box that you put the book in”. The analysis is consistent with the observation that *wh*-questions using this strategy use a special relative form of the verb. Critical to this relative clause analysis is the claim that there is no real *wh*-movement here. The *wh*-phrase is merged in its surface position. A&R provide a variety of evidence to support this claim, which I will not repeat here, but are expanded upon in Adger and Ramchand (2005)².

To account for the apparently successive cyclic complementizer agreement made famous in McCloskey (1979) for Irish (a Scottish Gaelic example is seen in (3)), A&R propose that the C.REL complementizer has the function of binding a *pro* variable in the relative portion of the question, just as it would in a relative clause. A&R2000 claim that the cyclic complementizer agreement is accomplished through a cyclic application of AGREE, rather than cyclic Move. The first C-relative binds the second, which in turn binds the *pro*.

- (3) Cò_i a_i thuir thu a_i sgrìobh *pro*_i e?
 what C.REL say.PAST you C.REL write.PAST it
 “Who did you say wrote it?”^[L]_[SEP] (A&R: e.g. 3)

The other strategy A&R propose for forming a *wh*-question involves a different complementizer type. In this structure, after the *wh*-phrase, we have a complex complementizer that consists of a preposition, in its definite form, followed by a particle (typically *an/am*) followed by a verb in its dependent, rather than relative, form. A&R claim that this structure does involve movement, but it is local A-movement despite being movement to the specifier of a CP. An example of this second strategy is seen in (4)

- (4) Cò ris an robh thu ag èisdeachd
 Who with C_[+Q] be_[PAST, DEP] you PROG listening
 ‘Who were you listening to?’ (A&R: e.g. 84)

¹ A&R speculate that the version of the copula allowed in such constructions is null.

² Seth Cable has asked me if strategy 1 *wh*-constructions seem to show the property that they resist the “mention some” interpretations in the appropriate contexts, like clefted *wh*-phrases do in English and Dholuo (Cable 2012). My speaker had no problems with “mention some” interpretations of either of the strategies. This might be evidence that they aren’t true clefts. On the other hand, it is really hard to tell if clefts in Scottish Gaelic actually have the same sets of pragmatic restrictions that clefts in English do more generally. Gaelic speakers use clefts in all sorts of contexts that sound strange to English ears. I haven’t been able to do a systematic study of why clefts are used so pervasively in the language, but it doesn’t surprise me that a cleft-like construction might lack the implicatures found with the more restricted cleft constructions found in languages like English.

A&R propose that the underlying structure of this is not a copular structure but a simple clause with a prepositional complementizer. The DP raises to the specifier of this C.

- (5) [DP wh]_i [ris+an [V.DEP ... t_i]]

The fact that this strategy is strictly clause bound follows from the A-movement property³. It also predicts that the *wh*-element will reconstruct for binding purposes, which it does (see A&R for details).

Strategy 1 and strategy 2 are easily distinguished morphologically. First, the two strategies use two different forms of the verb. Strategy 1 uses the *wh*-complementizer *a* followed by the so called ‘independent form’ of the verb. Strategy 2 uses the yes/no question complementizer *an*, followed by the ‘dependent form’ of the verb. For example, the past tense form of the verb ‘to be’ in a strategy 1 context is the independent *a bha*, and the past tense form in strategy 2 is the dependent *an robh*.

Second the two strategies use different inflectional paradigms for any pied-piped preposition. Strategy 1 pied-piped prepositions are invariably in the 3rd person inflected form, and strategy 2 prepositions are invariably in the definite form. (See Sheil 2015 for some discussion of why this might be the case). So we can use the inflection on the preposition as a guide to clearly identify which strategy is in use.

On the surface the two strategies have one striking thing in common, the *wh*-element and any pied-piped preposition are in an inverted order. Scottish Gaelic, like all VSO languages, is strictly prepositional. In almost all situations adpositions precede their complements:

- | | | | | |
|-----|----|--------------|----|---------------|
| (6) | a) | ri Seumais | b) | *Seumais ri |
| | | to James | | James to |
| | c) | aig an taigh | d) | *an taigh aig |
| | | at the house | | the house at. |

But in both *wh*-strategies, the preposition is inverted⁴ with respect to its complement. An example using strategy 1 (the copular strategy) is (7). An example using strategy 2 (the prepositional complementizer) is (8)

- (7) Cò leis a bha Iain a’ sgrìobhadh
 what with.3MS C.REL was Iain writing
 ‘With what was Iain writing?’ (A&R: e.g. 69)

- (8) [Dè a’ chaileag] ris an do dh’èisd thu
 What the girl to.DEF C.DEP PAST listen.PAST.DEP you
 ‘Which girl did you listen to?’ (A&R: e.g. 129)

³ An alternative analysis might distinguish the two strategies based on the relationship between the *wh*-element and various positions in a split CP structure, see for example van Craenaenbroeck (2012). For the point of this squib however, these two analytical possibilities share the property that strategy 1 constructions would involve a base generated *wh*-element that controls a variable, whereas strategy 2 constructions involve movement that governs a trace. So for the purposes of this squib, they are roughly identical.

⁴ For discussion of Pied Piping with inversion in other languages see Aissen (1996), Austin (2001), Black (2000), Broadwell (1999, 2001, 2002), Broadwell and Lillehaugen (2006), Eberhard (1999), Heck (2004, 2008), Trechsel (2000).

A&R have two completely different explanations⁵ for each of these inversions. For strategy 2, the inversion trivially follows from their analysis of the preposition forming a complex with the complementizer and the *wh*-element raising around it (9b). But they have an entirely different analysis for strategy 1. The base generated “subject” of the copular construction can be a PP, but the preposition takes a null *pro* variable that is bound by the *wh*-element in the PP specifier (9a).

- (9) a) Strategy 1: $\emptyset_{\text{COP}} [\text{PP Wh}_i [\text{P } pro_i]] [\text{C.REL V } \dots pro_i]$
 b) Strategy 2: $[\text{wh}]_i [\text{P+C.DEP V.DEP } \dots t_i]$

These two structures have markedly distinct constituent structures. In particular, the preposition is in different constituents in the two structures: With their analysis of strategy 1, the preposition is in the same constituent as the *wh*-element. In their analysis of strategy 2, it is part of the same constituent as the complementizer.

We can test for these two constituent structures by looking at phenomena that can parse apart constituency at this level. One such possibility is sluicing⁶. Operating on the standard assumption that sluicing is TP deletion (Merchant 2001), we expect that both structures would allow the *Wh* + *P* string to survive, because both elements are outside the TP. A subtler understanding of the morphology would suggest that the *P+C* complex is actually cliticized *R*-ward to the *V*, which is in *T* – as argued for Irish complementizers in McCloskey (1996).

- 10) a) **Strategy 1:** $[\text{Wh P.3MS}] \{_{\text{TP}} \dots \}$
 b) **Strategy 2:**
 version i) *P+C* are in *C*: $[\text{Wh } [\text{P.DEF+C } \{_{\text{TP}} \dots \}]$
 version ii) *P+C* are cliticized to *T*: $[\text{Wh } \{_{\text{TP}} \text{P.DEF+C+T+V} \}]$

Let us start with strategy 1. As predicted, the *wh*-phrase and the 3rd person inflected default form of the preposition survive the sluice:

⁵ There are various accounts of pied piping with inversion (PPI) in the closely related language Modern Irish. Reminiscent of A&R’s explanation, McCloskey (2002) argues that the *wh*-phrase is base generated in the spec of CP. Noting that the preposition is in its inflected 3rd person form typical of a resumptive structure (in Irish the *wh*-construction is also marked as having an indirect or resumptive strategy in the form of the preverbal particle), he claims that there is a $[\text{PP P } pro]$ constituent, which is fronted via topicalization to the left edge of the TP:

- (i) $[\text{CP } wh\text{-phrase}_i \text{ C } [\text{TP } [\text{PP P.INFL } pro_i] \dots]]$

There is subsequent phonological incorporation of the *P* into the *wh*-phrase to correctly order it with respect to the *C*. It’s not clear that this account can transfer to Scottish Gaelic. This won’t work for the strategy 2 cases as the preposition is in its definite form. And it is unlikely for the strategy 1 cases, because Scottish Gaelic does not have resumptive pronouns. Noonan (1997), also discussing Irish, proposes that PPI is in fact a kind of secondary *wh*-movement. The PP undergoes *wh*-movement, to a position within the left periphery, and then the DP inside that PP, moves again to the left, perhaps for focus or topicalization:

- (ii) $[\text{CP } wh\text{-phrase}_i [\text{CP } [\text{PP P.INFL } t_i] wh\text{-C } \dots]]$

The challenge for accounts like this is that prepositions do not normally inflect with an overt complement and here the *wh*-phrase is self-evidently overt, albeit inverted.

⁶Perhaps this is more accurately swiping rather than sluicing, because of the inversion. But since the inversion is standard, in non-sluicing contexts, it is hard to distinguish the two.

- (11) Fhuair mi e bho cuideigin,
get.PAST 1S 3MS from someone
- ach chan eil cuimhn' agam cò bhuaithe.
but NEG be.PRES.DEF memory at.1S who from.3MS
'I got it from someone but I don't remember who from.'

And as expected, the pattern is different with Strategy 2. Sluicing is, of course, possible without an overt P, as predicted by (10b version ii) or predicted in a situation where there has been no pied piping at all:

- (12) Dh'fhalaich mi e fo taigh air choireigin,
hide.PAST 1S 3MS under house on some.case
- ach chan eil cuimhn' agam cò fear?
but NEG be.PRES.DEF memory at.1S who one
'I hid it under some house but I don't remember which.'

But it is impossible with strategy 2 when the P is overt, this tells us that the P+C are in fact rightward cliticized and not part of the string above the TP.

- (13) *Dh'fhalaich mi e fo taigh air choireigin,
hide.pAST 1S 3MS under house on some.case
- ach chan eil cuimhn' agam cò fear fon (an)?
but NEG be.RES.DEF memory at.1S who one under.DEF C.DEF
'I hid it under some house but I don't remember which under.'

These results support the distinction between the two structures as proposed by A&R, with the additional condition that the P+C complex is rightward cliticized to the verb, as independently argued for by McCloskey (1996).

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