

A second perfect in Scottish Gaelic

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Overview

- Several varieties of Scottish Gaelic display two types of perfect aspect
- *air* \cong 'have Vd'
- as dèidh/an dèidh ≅ 'have recently Vd' (not quite, as we'll see)

Overview

- (1) Bha/tha/bithidh i air fàgail.
 be.PAST /be.PRES/be.FUT 3SF AIR leave.VN
 'She had/has/will have left.'
- (2) Bha/tha/bithidh i as dèidh fàgail.
 be.PAST/be.PRES/be.FUT 3SF AS DÈIDH leave.VN
 'She had/has/will have (just/recently) left.'

Overview

- Several other aspect markers are syntactically parallel (*gu, a' dol a, air, a', Ø*) (See also Schreiner & Carnie 2016)
 - Air is analyzed as a perfect marker by Ramchand (1993)
 - I have shown that it shows behavior very similar to that of the English perfect (Reed 2012)
- I assume these particles and *as dèidh* compete for insertion into the (viewpoint) Aspect node

Previous work

- An dèidh has been noted (Ó Sé 2004) as an "alternative" to the perfect marker air
- Ó Sé (2004) quotes Greene (1979: 93) as noting that variations with *air* and *an dèidh* are identical semantically; depends on age or dialect
- Ó Sé gives several examples from South Uist, Rannoch, Inverness, and Lewis; their translations do not indicate a recent perfect meaning

Previous work

- He also notes that several scholars of the language who are also native speakers (he cites Donald MacAulay, from Bernera, an island off the west coast of Lewis, Mòrag MacLeod, from Harris, and John MacInnes, from Raasay) have told him that they are of the opinion that an dèidh is uncommon, but found in use by speakers (though not the scholars themselves) in the Hebrides.
- He also notes several descriptions of Scottish Gaelic dialects that explicitly mention an dèidh/as dèidh as a marker of the perfect (Ó Sé 2004: 217-218).

Methods

- Data were gathered over the course of several years, primarily through elicitation
- One speaker from Skye, two speakers from Lewis
- All speakers bilingual and in their 60s, English acquired beginning at school

Methods

- English was used as the metalanguage
- Contexts were generally presented in English
- In some cases, a sentence or two of Scottish Gaelic (previously elicited, or in simple cases, constructed by me) was presented as lead-up
- Contexts and topics were tailored to the speaker's background and interests

Methods

- Scottish Gaelic sentences presented for grammaticality (or, more often in the cases here, felicity) judgments;
- Sometimes, English sentences presented, speaker asked to give a sentence with as close to the same meaning as possible in Scottish Gaelic.
 - (Usually this was done to collect natural sentences that would later provide context for a test sentence.)
- Truth value judgment tasks were generally not appropriate for this data—difference is one of felicity rather than truth value

Limitations of the data

- Working with a limited number of speakers presents challenges to generalizability
- Particularly here:
 - the construction is known not to be used everywhere;
 - there are dialectal differences in at least pronunciation, if not meaning;
 - both of the primary speakers consulted here report that it is likely not used much by younger speakers of the language

Limitations of the data

- No examples of aspectual uses of as dèidh/an dèidh in the Annotated Reference Corpus of Scottish Gaelic (Lamb, et al. 2016);
- Corpas na Gàidhlig: aspectual instances (in finite clauses) of an dèidh were found in seven texts
- In all of these texts, more numerous instances of *air* perfects were also found

Limitations of the data

- Given this and the fact that all of the speakers consulted use both *air* and *as dèidh/an dèidh*, I think it is safe to say that both are in the grammars of some speakers
- Difficult (if not impossible) to tell whether the "recent" meaning in as dèidh/an dèidh is present in the instances found in the corpus
- So, we must rely on the information garnered from the speakers via elicitation

- From the data given in Ó Sé (2004) and the impressions of the speakers consulted here, this aspectual construction is certainly used in at least parts of Skye, Lewis, and Uist, and at least sporadically elsewhere.
- At least Lewis and Uist speakers tend to use the spelling <an dèidh> or <an déidh>, while on Skye the spelling tends to be <as dèidh>.

 The pronunciation in the local variety of the speaker (S2) from Skye is roughly [as dʒoi]. In the variety of speaker S2, the word for 'after' is the same in spelling and pronunciation, with the exception of the case of 'after [number]', in which case the variation <an dèidh> [an dʒoi] is used.

 The situation in the Lewis speakers consulted is a bit more complex. Both speakers (S4, S5) employ varyingly <an dèidh> [an jej] and <an dèidh 's> [an jejs] for the aspectual construction (this variation is also noted in Ó Sé 2004: 217).

- Then, for speaker S4:
 - [an jej] vs. [an jejs] of the aspectual particle: at least somewhat phonologically based, with speakers consistently employing the [an jejs] version before vowels and the [an jej] version before words beginning with [s].
 - Elsewhere, I am as of yet unsure—before [f] speaker S4 has free variation, but seems to have a preference before other sounds.
 - Two words for 'after': <an dèidh> roughly [an jxi], and <as dèidh> [as jxi]; these seem to vary according to their syntactic position (possibly heading a CP or PP, respectively).

 More data will be needed to sort out this variation, but nothing in the data seems to indicate that there is more than one meaning at work between those two pronunciations (and the speakers who use them agree).

 In anteriority theories of perfects, the perfect says that event (/situation) time precedes reference (/assertion/topic) time (Reichenbach 1947, Binnick 1991, Hornstein 1990, Klein 1992, Smith 1997, Higginbotham 2009, Demirdache & Uribe-Etxebarria 1997 and f., et al.)

(3) PERFECT = $\lambda P_{(vt)}$. $\lambda t_{(i)}$. $\exists e: [\tau(e) < t \& P(e)]$

E.g. Kratzer 1998, Pancheva & von Stechow (2004)

- Is *as dèidh* similar to an English perfect?
 - Distributionally aspectual
 - Infelicitous with past positional adverbials (cf. German)
 - Comrie 1976, McCoard 1978, Hornstein 1977, Dowty 1979, Klein 1992, Giorgi & Pianesi 1998, Musan 2001, Pancheva & von Stechow 2004, among others
 - Readings vary with different adverbial positions
 - e.g., Hornstein 1990, McCoard 1978, Comrie 1985, Klein 1992; see also Michaelis 1994
 - Experiential and resultative readings

- Distributionally aspectual, not tense:
- (4) Bha/tha/bithidh Calum as dèidh dannsadh. be.PAST/be.PRES/be.FUT Calum AS DÈIDH dance.VN 'Calum had/have/will have just/recently danced.'

Past adverbial infelicity:

- (5) Tha Iain as dèidh ithe an-diugh (mar tha). be.PRES Iain AS DÈIDH eat.VN today already 'Iain has (recently-)eaten today (already).'
- (6) #Tha Iain as dèidh ithe an-dè/a-raoir.
 be.PRES Iain As DÈIDH eat.VN yesterday/last night
 Intended: 'Iain has (recently-)eaten yesterday/last night.'

Presented to speaker without context; context provided by speaker S2: "Because you came down here with a plate of dinner for him, I'm looking at you and I'm saying, he's already eaten today. Go away with your food."

Ambiguity of adverbial attachment

- (7) Bha Calum as dèidh a' bhùth fhàgail be.PAST Calum AS DÈIDH the.SF shop leave.VN aig meadhan-latha.
 - at mid-day
 - 'Calum had (recently) left the store at noon.'

(8) Bha Calum as dèidh a' bhùth fhàgail be.PAST Calum AS DÈIDH the.SF shop leave.VN mar tha aig meadhan-latha. already at mid-day 'Calum had (recently) left the store already at noon.' (reference-time reading)

(9) Bha Calum as dèidh a' bhùth fhàgail be.PAST Calum AS DÈIDH the.SF shop leave.VN dìreach aig meadhan-latha, agus bha directly at mid-day and be.PAST lain as dèidh a' bhùth fhàgail aig uair. lain AS DÈIDH the.SF shop leave.VN at one 'Calum had left the store precisely at noon, and lain had left at 1.' (event time reading)

Experiential reading

Presented without context; context provided by speaker S2: Responding to "Let's go out for a drink with Calum." "I've seen him 3 times already this week! I'm Calumed up to here. He's got a new car and that's all he talks about."

(10) Tha mi as dèidh Calum fhaicinn trì be.PRES 1S AS DÈIDH Calum see.VN three tursan an t-seachdain seo mar tha. time.P the week PROX already 'I have seen Calum three times this week already.'

• Resultative reading

Context: I spill my coffee. I run to the kitchen, where you're standing.

(11) Tha mi as dèidh mo chofaidh a dhòrtadh. be.PRES 1S AS DÈIDH POSS.1s coffee spill.VN thoir dhomhsearbhadair! give.IMP to.me towel 'I've spilled my coffee, give me a towel!'

- Perfect of recent past
- Context: We are on the phone and I ask if you want to meet up for coffee. You decline, because you need to pick up a friend from the airport.

(12) Tha Eilidh as dèidh Alba a ruigsinn, be.PRS Eilidh AS DÈIDH Scotland reach/arrive.VN mar sin feumaidh mi a togail so/like that need 1S 3SF pick.up bhon a' phuirt-adhair. (S2) from the airport 'Eilidh has (recently) reached/arrived in Scotland, so I need to pick her up from the airport.'

(13) Tha mi air/(#as dèidh) Cher fhaicinn
 be.PRS 1S AIR/AS DÈIDH Cher see.VN
 trì tursan na mo bheatha.
 three time.P in POSS.1S life
 'I have seen/#recently-seen Cher three times in my life.'

(14) Tha mi air/(#as dèidh) Cher fhaicinn trì tursan na mo bheatha. Chunnaic mi i dà thuras ann an dà mhìle, agus tha mi as dèidh a faicinn aon turas am bliadhna.

'I have seen Cher three times in my life. I saw her twice in 2000 and I have recently-seen her once this year.' [UT: 2011]

- What does as deidh care about?
- In the previous examples:
 - the perfect time span is long (left bound is beginning of speaker's life) and
 - the span between event and reference times is long
- Which one leads to ungrammaticality?

(15) √Trì tursan na mo bheatha tha mi three time.P in POSS.1S life be.PRES 1S **as dèidh** an doras a dhùnadh agus AS DÈIDH the.SM door close.VN and ghabh mi beachd nach robh take.PAST 1S observation NEG COMP be.PAST.DEP na h-iuchraichean agam. the.P key.P at.1S 'Three times in my life I have just closed the door and realized I didn't have my keys.'

The *as dèidh* restriction is determined with respect to a norm

- The "restriction" present with *as dèidh* applies to how close the event time is to the reference time
- The timing is not absolute; acceptability depends on the semantics of the verb phrase and real-world knowledge

The meaning of as dèidh

- While *as dèidh* is felicitous in the context of having seen someone within the past week in (16), it is felicitous only if the event has occurred within the space of about an hour in (17).
- (16) Tha mi as dèidh Cher fhaicinn trì tursan bho
 be.PRS 1S AS DÈIDH Cher see.VN three time.P from
 latha na Sàbaid.
 day of.the Sabbath
 - 'I have (recently) seen Cher three times since

Sunday.' (Reed 2012: 77)

The meaning of as dèidh

- Context: The speaker and a friend need to eat before going out. The speaker eats and otherwise gets ready. Her friend phones and asks if she is ready, and the speaker answers:
- (17) Tha mi as dèidh/(#air) ithe, tha mi deiseil. be.PRS 1S AS DÈIDH/(#AIR) eat.VN be.PRS 1S ready 'I have (recently) eaten, I'm ready.'

The meaning of as dèidh

- The interval between event and reference times: how "long" of a perfect is it?
- "the E_R interval does not have a distinguished status in the perfect" (latridou, et al. 2001:158)

The denotation of an dèidh

Gleann Dail Glendale

The denotation of as dèidh

- Need to account for:
 - basic meaning,
 - the details of the time relation it conveys, and
 - its contextually-determined nature

The denotation of as dèidh

- I take as dèidh to be one possible realization of the (viewpoint) Aspect head; it specifies that event time precedes reference time.
 - The Aspect head is an operator that existentially quantifies over the event and introduces a relationship between the time of the event and another time; this time will be existentially bound by tense. Aspect composes with vP and sets up a relationship of precedence between event and reference time.
- (18) Denotation of *as dèidh*, version 1
- [[as dèidh]] = $\lambda P_{(vt)}$. $\lambda t_{(i)}$. $\exists e: [\tau(e) < t \& P(e)]$

The denotation of as dèidh

- as dèidh contextually restricts the length of the interval between event and reference times
- Let ϵ_c stand for a small quantity, the value of which is determined by the context.
- The value of the interval between the final moment of event time and initial moment of reference time (calculated by subtracting τ(e)_{final} from t_{init}) must be less than or equal to this small quantity.

(19) Denotation of *as dèidh*, version 2 [[as dèidh]] = $\lambda P_{(vt)}$. $\lambda t_{(i)}$. $\exists e: [\tau(e) < t \& P(e) \& [|t_{init} - \tau(e)_{final}| \le \varepsilon_c]]$

- This kind of situation-dependent meaning is also seen in quantifiers like *few* and *many*, which have been famously troublesome for generalized quantifier theory (e.g., Barwise & Cooper 1981).
- Extensional accounts of quantifiers like *few* and *many* (e.g. Barwise & Cooper 1981) tend involve the cardinality of the intersection of sets
- Intensional accounts like that of Keenan & Stavi (1986) involve comparative norms in possible worlds

- Lappin (2000) presents an intensional parametric account that also depends on the concept of normative situations
- The problems are similar for *as dèidh*;
- Instead of needing to compare the cardinality of a set to a norm, we need to compare the value of the length of an interval of time (between an event time and an reference time) to a normative interval of time for that VP (and discourse situation).

- Lappin (2000) many: comparing the 'actual situation' sa to the set of normative situations (sn), S.
 (20) [B]^{sa} ∈ [many]([A]^{sa}) iff S ≠ Ø, and for every sn ∈ S, |[A]^{sa} ∩ [B]^{sa} | ≥ |[A]^{sn} ∩ [B]^{sn} | (Lappin 2000: 602)
- To paraphrase, many As are B is true in an actual situation if and only if it is true that the number of As that are B in the actual situation is greater than or equal to the number of As that are B in any normative situation.
- What constitutes the normative situation is determined on a case-by-case basis.

• where *i* is an interval of time:

(21) $|i^{sa}| \le \varepsilon_c \text{ iff } S \ne \emptyset, \text{ and for every sn} \in S, |i^{sa}| \le |i^{sn}|$

• That is, an interval in an actual situation is shorter than ε_c if and only if the size of the actual interval is less than or equal to the size of the interval in any normative situation.

Computing normative situations

- One way of conceiving of the "shortness" of an interval conveyed by *as dèidh* in these cases is that it conveys that the interval is less than average.
- For the normative situation for the interval between graduating (g) and getting a job (j), the normative situation could be defined as follows

Computing normative situations

(here, t_x merely represents "time of x", not reference time specifically)

(22) sn_{gj} : $|t_j^{sn} - t_g^{sn}| < k$, where $k = average \{|t_j^{S} - t_g^{S}|\}$

- That is, the normative situation regarding graduating and getting a job is:
 - the value of the interval between graduating and getting a job is less than the average of the length of normative graduation-job intervals

Computing normative situations

- Going on runs? (23) sn_{run} : $|t_{run(n)}^{sn} - t_{run(n-1)}^{sn}| < k$, where k = average $\{|t_{run(n)}^{s} - t_{run(n-1)}^{s}|\}$
- That is, the normative situation regarding running (for someone who tends to run every few days) is that the value of the interval between the current run and the previous run is less than the average of the length of normative between-run intervals.

Final denotation

• The final denotation for *as dèidh* integrates the normative situation:

Denotation of *as dèidh*, final version (24) [[as dèidh]] = $\lambda P_{(vt)}$. $\lambda t_{(i)}$. $\exists e: [\tau(e) < t \& P(e) \& [|t_{init} - \tau(e)_{final}| \le \varepsilon_c]]$ $(|t_{init} - \tau(e)_{final}| \le \varepsilon_c \text{ iff } S \ne \emptyset$, and for every sn $\in S$, $|i^{sa}| \le |i^{sn}|$)

Sentence-level denotation

(25) Tha Iain as dèidh ruith.
 be.PRS Iain AS DÈIDH run.VN
 'Iain has (recently) run.'

 $= \exists t' [t' = t_{now} \& \exists e: [\tau(e) < t' \& [[lain run]](e) \& [|t_{init} - \tau(e)_{final}| \le \varepsilon_c]]] \\ (|t_{init} - \tau(e)_{final}| \le \varepsilon_c \text{ iff } S \neq \emptyset, \text{ and for every sn} \in S, |i^{sa}| \le |i^{sn}|) \\ (sn_{run}: |t_{run(n)}^{sn} - t_{run(n-1)}^{sn}| < k, \text{ where } k = \text{average} \\ \{ |t_{run(n)}^{S} - t_{run(n-1)}^{S}| \})$

Sentence-level denotation

 In this way, we have a set denotation for as dèidh, while still allowing for different normative situations depending on the predicate, the discourse context, and perhaps even the individual speaker.

I'm a Sgiathanach (didn't you know? ②), being asked to volunteer my time for a project. It's a fundraiser for my daughter's school, and they're setting up a "world cities fair", where different booths will have information about different countries, some with specialty foods, etc. The organizer is trying to get me to be in charge of the Paris booth, and asks if I've been there before.

 Situation 1: I've been to Paris several times, most recently just this very week. I really want to be <u>chosen</u> to be in charge of the Paris booth.

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Tha mi #(dìreach) air a bhith ann am Paris OR Tha mi ?(dìreach) as dèidh a bhith ann am Paris

 Situation 2: I've been to Paris several times, but the last time was <u>at least 20 years ago</u>. I'm really swamped at work and I <u>do not want to be in charge</u> of the Paris booth, so I'm trying to downplay my experience.

 Situation 2: I've been to Paris several times, but the last time was <u>at least 20 years ago</u>. I'm really swamped at work and I <u>do not want to be in charge</u> of the Paris booth, so I'm trying to downplay my experience.

Tha...tha mi air a bhith ann am Paris (ach...)

 Situation 3: I've been to Paris several times, most recently just this very week. But I'm really swamped at work and I do not want to be in charge of the Paris booth, so I'm trying to downplay my experience.

 Situation 3: I've been to Paris several times, most recently just this very week. But I'm really swamped at work and I do not want to be in charge of the Paris booth, so I'm trying to downplay my experience.

Tha...tha mi air a bhith ann am Paris.

 Situation 4: I've been to Paris several times, but the last time was <u>at least 20 years ago</u>. But <u>I really</u> <u>want to be chosen</u> to be in charge of the Paris booth.

 Situation 4: I've been to Paris several times, but the last time was <u>at least 20 years ago</u>. But <u>I really</u> <u>want to be chosen</u> to be in charge of the Paris booth.

Tha, tha mise air a bhith ann am Paris OR Tha mise as dèidh a bhith ann am Paris

• Relevance?

- #Chan eil mi as dèidh a bhith ann am Paras.
- ✓Chan eil mi as dèidh a bhith ann am Paras, chan eil mi as dèidh a bhith ann am Rome, chan eil mi as dèidh ann am [...] .. gu dearbh - chan eil mi as dèidh a bhith ann an àite (na galla) sam bith!
- I haven't been to Paris, I haven't been to Rome, I haven't been [other places]...in fact, I haven't been anywhere at all, dammit! (S2)

• Emphasis?

 "You would use this sentence if someone has said that you had been to Paris when you had not. For instance, if someone had announced, wrongly 'Tha Maighread an dèidh 'sa bhi ann am Paras'." (S4)

- Background: Carpenter is working in an old house, and asks the owner about an old door that doesn't seem to shut properly. Could he say this? If so, what would it mean?
- Am bheil thu riamh as dèidh an doras sin a dhùnadh?
- "Have you ever been after closing that door? so he wouldn't use the as dèidh as it would mean -have you ever just closed that door - meaning he was in the habit of making a drama about closing the door and had never just simply closed it without fuss."

- What about, you're talking about who's a bigger Cher fan. Other person: "whatever, I bet you haven't even seen her since 2000."
- Bho dà mhìle? Tha mi as dèidh Cher fhaicinn trì tursan bho 2000! Dà turas an t-seachdain sa chaidh agus aon turas an dè!

- There's a cold snap, and it snows! A child wants to go outside and play in the fresh, unbroken snow. Unbeknownst to her, her father cleared it from the walk at 5am, when the snow stopped. The child comes back in, pouting. When you ask what's wrong, she replies
- Tha dadaidh an dèidh a an t-sneachd a sguabadh air falbh mur thà (Daddy has already swept the snow away already).

 Context: In a university classroom, the students are introducing themselves by giving their name and an interesting fact about themselves. The teacher is now recapping as a way of trying to memorize names and facts. Lachy had mentioned his trip to Paris when he was a boy, and Bill added that he had been to America (just the previous month). "Tha Lachie air a bhith ann am Paras could indicate that he had been there at any time. Tha Lachie an dèidh 's a bhith an am Paras also indicate that he could have been there at any time, however it could also suggest that he has been there recently, but Tha Lachie dìreach an dèidh 's a bhith ann am Paras indicates that he has been there very recently."

Universals...

- You go to Glasgow and see an old friend from the island, who (unbeknownst to you) moved there some 25 years ago. You express surprise at seeing her there, and tell her you thought she lived in Aberdeen. She replies
- Chan'eil, tha mi air a bhith 'fuireach ann an Glaschu bho 1995 or Chan'eil tha mi 'n dèidh 'bhith fuireach ann an Glaschu bho 1995. (S4)
- Tha mi as dèidh a bhith fuireach ann an Glaschu airson ùine mhòr (a-nisde). (S2)

• An emphatic perfect?



Implications: Graded temporality

- Various dialects of Irish show two types of perfect—one (or two) periphrastic perfects meaning 'I have [verb]ed', as well as one "after perfect", which patterns with the *as dèidh* perfect (see extensive discussion in Ó Sé 1992, Ó Sé 2004).
- Hiberno English and Scottish English both also have "after perfects" as well

Implications: Graded temporality

- Yorno So (Dogon, Mali): emphatic perfect, completive perfect ('have really V'd) (Heath 2017)
- Mbugu (Bantu, Tanzania): emphatic perfect (Mous 1997)
- Afar (Cushitic, Ethiopia): emphatic perfect, mark pivotal point in storyline (Bliese 1981)

Implications: Graded temporality

- This is certainly not a comprehensive list.
- Having more than one temporal distinction of perfect aspect in a language is not an isolated phenomenon and should be kept under consideration whenever theories of aspect are being built or maintained

Summary

- The data presented here:
 - Add to our understanding of aspect cross-linguistically
 - Suggest that any theory of temporal distinctions must be able to account for degrees of at least some types of aspect
 - Provide another instance of the grammaticalization of vagueness and/or context dependence in the temporal realm



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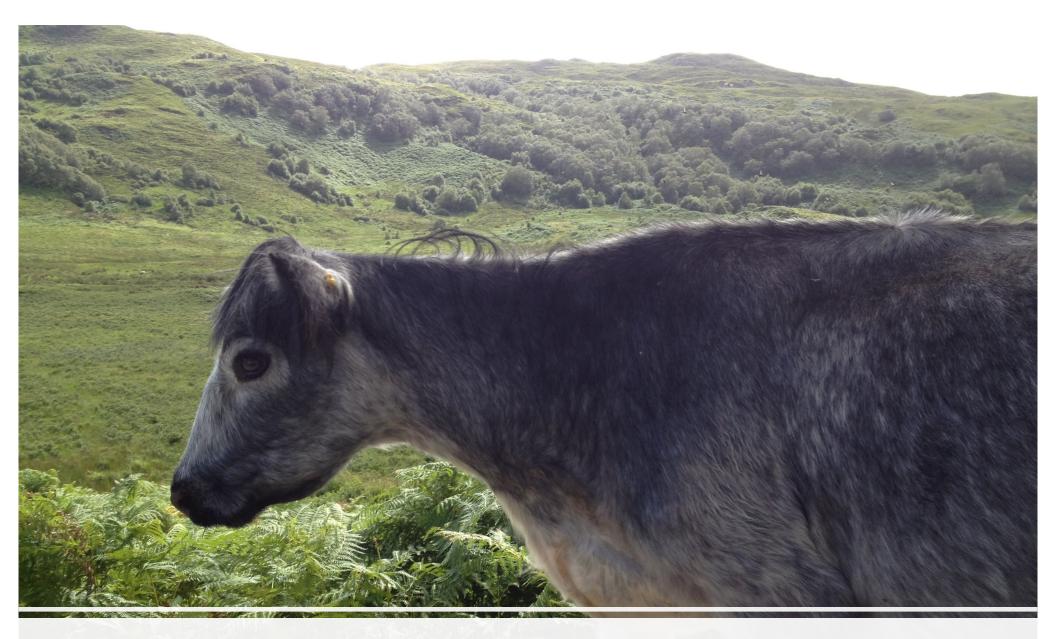
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Appendices

Variation

 Speaker S4, on consulting a dictionary after wondering about the identity of the <'s>, offered the possibility that the word <an dèis/an déis>, also meaning 'after', might be "responsible" for the aspectual construction's pronunciation and the mystery <s>, despite the speakers' use of the spelling <an dèidh>.