Predication with *ann* as repair in Scottish Gaelic

Sylvia L.R. Schreiner (*Sylvia L. Reed*) · Wheaton College, MA
schreiner_sylvia@wheatoncollege.edu
88th Annual Meeting of the LSA, 3 January 2014

1 Introduction

1.1 Overview of the problem

- In this paper I present a novel analysis of the construction in Scottish Gaelic (*Gàidhlig*, hereafter SG) that includes:
    - the verb *bi* 'be',
    - the particle *ann* (homophonous with the preposition 'in'), which must be inflected for the subject-agreeing possessive pronoun, and
    - either a noun (a) or "verbal noun" form of a verb (b):

(1) a. *Tha* *Iain* *'na* *dhotair.*
be.PRES Iain ANN.PRO.3SM doctor
'Iain is a doctor.'

b. *Tha* *Iain* *'na* *sheasamh.*
be.PRES Iain ANN.PRO.3SM stand.VN
'Iain is standing [i.e., in a standing position].'

- This construction with "verbal" material looks very much like sentences marked for non-perfective aspect in the language, which include:
    - the same verb *bi* 'be',
    - one of several particles (*a'* and *a' dol a*, *air*, *as dèidh*, and *gu*) homophonous (or nearly so) with prepositions, and
    - the "verbal noun" form of the verb

- Each occurs with the verb *bi* 'be' in one of its tensed forms, followed by the subject, the particle, and the verbal noun form of the verb.

- With *a'* and *a' dol a*, a direct object follows the verbal noun:

(2) *Bha/tha/bithidh* *mi* *a'* *sgrìobhadh* *na* *litrichean.*
be.PAST/be.PRES/be.FUT 1S A'/at write.VN the.P letter.P
'I was/am/will be writing the letters.'

(3) *Bha/tha/bithidh* *mi* *a' dol a* *sgrìobhadh* *na* *litrichean.*
be.PAST/be.PRES/be.FUT 1S A' DOL A/going to write.VN the.P letter.P
'I was/am/will be going to write the letters.'

- With *air*, *as dèidh*, and *gu*, a direct object moves to a position preceding the verbal noun, and with a full NP object we see a default object agreement particle *a* in-between the object and the verbal noun.

(4) *Bha/tha/bithidh* *mi* *air/as dèidh* *na* *litrichean* *a* *sgrìobhadh.*
be.PAST/be.PRES/be.FUT 1S AIR (on)/AS DÈIDH (after) the.P letter.P AGRO write.VN
'I had/have/will have/have just written the letters.'

(5) *Bha/tha/bithidh* *mi* *gu* *na* *litrichean* *a* *sgrìobhadh.*
be.PAST/be.PRES/be.FUT 1S GU/to the.P letter.P AGRO write.VN
'I was/am/will be about to write the letters.'

  - If there is a pronominal object, it occurs directly after the aspect particle (or the particle is inflected for it, in the cases of *a'* and *a' dol a*).

- At first glance, this particle with verbal nouns also seems to be conveying some kind of aspectual meaning. Notice the contrast with the imperfective particle *a'* in (6). (*Ann* appears in different forms, discussed shortly)

(6) a. *Tha* *Iain* *a'* *seasamh.*
be.PRES Iain A' stand.VN
'Iain is standing up [i.e., moving into a standing position].'

b. *Tha* *Iain* *'na* *sheasamh*[1]*.*
be.PRES Iain ANN.PRO.3SM stand.VN
'Iain is standing [i.e., in a standing position].'

- It seems as if *ann* is marking something like stativity (while the imperfective particle *a'* leads to a dynamic interpretation)

- However, verbs that, at least in English, would be classified as lexical statives appear not with *ann* but with imperfective *a'* or in a kind of possessive construction with a nominal as the subject:

(7) *Tha* *fios* *aig* *Alaig* *air* *mòran* *rudan.*
be.PRES knowledge at Alaig on many thing.P
'Alec knows many things.'

(8) *Tha* *fios* *agam* *ciamar* *a* *dh'iasgachas* *tu.*
be.PRES knowledge at.1S how WH_COMP fish.REL_FUT 2S
'I know how to fish.' (Lit.: 'I know how you will fish.')

[1] The 1st singular, 2nd singular, and 3rd singular masculine forms trigger consonant mutation in the following word (if it is allowed).

- In fact, *ann* only appears with a small set of verbs, which seems to be semantically cohesive in some way
    - Verbs for 'sit', 'stand', 'lie', 'stretch out', 'rest', 'stop', 'sleep', 'wake', and 'run'—verbs of bodily position or state (more on *ruith* 'run' later)

- In addition, the particle does not appear by itself; rather, it is inflected for (or appears alongside) the possessive pronoun, which agrees with the subject.[2]

- The only time a pronoun appears in this position with the aspect particles is when it is an object pronoun, not a possessive one:

(9) a. *Tha* *mi* *'gad*[3] *cluinntinn.*
be.PRES 1S A'.2S hear.VN
'I hear you.'

b. *Tha* *mi* *a'* *cluinntinn.*
be.PRES 1S A' hear.VN
'I hear.'

c. **Tha* *mi* *'gam* *cluinntinn.*
be.PRES 1S A'.1S hear.VN
(Intended: 'I hear.')

- Finally, the particle + possessive pronoun combination does not just appear with verbal nouns; it is also the strategy for nominal predication with *bi* 'be' (nominal predication with the copula *is* does not require this strategy); none of of the aspect particles can appear with nominals (except when they are being used in their prepositional meanings, e.g., *air* for 'on', etc.):

(10) *Tha* *e* **('na)* *dhotair.*
be.PRES 3SM ANN.3SM doctor
'He is a doctor.'

- The difference between predication with *bi* and *is* has been attributed to a stage-level/individual level distinction (Ramchand 1996, Adger & Ramchand 2003; see also Carnie 1995 for Irish)

---

[2] For reference, the forms are thus:

(1) Forms of the possessive pronoun

	sing	pl
1st	*'nam*^{L2}	*'nar*
2nd	*'nad*^{L}	*'nur*
3rd masc	*'na*^{L}	*'nan/nam*[2]
3rd fem	*'na*	

These come from a contraction of *ann* + the possessive pronouns (*mo*^{L} 'my', *do*^{L} 'your', *a*^{L} 'his', *a* 'her', *ar* 'our', *bhur/ur* 'your (pl./polite)', *an/am* (their)). In my consultant's SG, in the first and second person singular versions, these will sometimes come out as *na mo*/*na do*; the extra 'a' in these two forms is presumably epenthetic.

[3] The possessive forms of *a'/ag* (and of *aig*, the form when used as a preposition) are as with *ann*, only with a 'g' instead of an 'n' (for *a(i)g mo*, etc.): *'gam*^{L}, *'gad*^{L}, *'ga*^{L}, *'gar*, *'gur*, *'gan*/*'gam*. The same pattern occurs with *gu* and the *a/do* in *a' do*/*do*, though not with *air* or *as dèidh*.

- To summarize, there are four major oddities about this construction:

A. It is limited to a handful of verbs of bodily position or state ('sit', 'stand', 'lie', 'sleep', etc.)
   - This isn't what we see with the aspectual particles—they can appear with any verb
   - It's limited to the "stative" ('be seated') uses; the "dynamic" ('move into a seated position') meanings require the imperfective particle

B. It is not just found with "verbal nouns", as the other particles are—it is also the way to make stage-level-like predicates with nominal material in the language
   - If the particle were instantiating Asp, we wouldn't expect to see it with nominal material;
   - If it's instantiating P, its appearance with "verbal material" is unexpected

C. It appears only with this stage-level-like category of nominal predicates, and not individual-level-like predicates
   - Its presence is obligatory in nominal predicates of this kind—the verb *bi* alone is not enough
   - The categories themselves are not entirely clear—they don't quite match up with the traditional individual- vs. stage-level distinction

D. It is, somewhat mysteriously, inflected for the subject-agreeing possessive pronoun

- What is going on with this construction, that it's involved in stage-level-like nominals and "verbs" of bodily position, and nothing else?

1.2 Analysis roadmap

- I argue that the *ann*+pronoun combination is not an instantiation of Aspect, but instead heads a PP as part of a repair strategy needed to create a particular sort of nominal predicate in SG (following work by Ramchand 1996 and Adger & Ramchand 2003).

The fact that particular roots end up in these predicates (which in turn form a natural class) has a semantic explanation (A, C)

- The traditional distinction between traditional individual-level and stage-level predicates does not correctly predict the pattern of data seen in SG

- Instead I employ Roy's (2006, 2013) "defining" vs. "characterizing" and "situation-descriptive" predicates.
  - I argue that the predicates that exist in the *ann*+pro construction are what I term *homogenous to the moment level* and (after Roy) *non-defining/non-maximal*
  - *Ann*+pro forms predicates with
    (a) nominal material containing characteristically nominal roots, and
    (b) bodily position/state roots with two very different natural interpretations and that would typically be made into verbal predicates

The fact that the roots get inserted into nominal material and then embedded under P has a syntactic explanation (B)

- Bare NPs cannot be predicates by themselves in SG (Ramchand 1996, Adger & Ramchand 2003)
- One kind of nominal (individual-level-like) can be formed with the copula *is*[4] (which doesn't require a predicational projection)
- Our kind of nominal, which employs the verb *bi* 'be', must undergo repair by embedding within a PP headed by *ann*+pro

The subject-agreeing possessive pronoun is the reflex of an Agree relation, and serves to overtly link the subject and the nominal (as in "personal" reflexives such as *hold one's breath*) (D)

The rest of the talk:

1.3 Previous accounts
2 Data: *ann*+pro with verbal and nominal material
3 Tools we need for the analysis
4 Detailed analysis
5 Conclusion

1.3 Previous accounts of *ann*

- It has been noticed that *ann*+pro in the contexts we are discussing here is performing a function different from the one it performs when it is used as a (locative) preposition (Cram 1983, McCloskey & Hale 1984, Lamb 2001)

- The only focused analysis of *ann* in the use I am concerned with here is found in Cram (1983)
    - Transformational grammar analysis of the particle
    - Argues against traditional grammars which treat it as a preposition everywhere it appears
    - Concludes that *ann* is a realization of the "progressive" particle *a(g)* that appears when its complement is one of a restricted group of verbs, or is a nominal

    - Attempts to demonstrate that *ann* patterns syntactically with the language's aspect particles rather than with its prepositions, and to ground the syntax of *ann* in the syntactic patterns found in the rest of the language
    - Also takes the important step of relating the uses of *ann* in both verbal and nominal predicates

[4] Generally, my consultant does not have bare copular constructions (with *is*) in her dialect; instead she allows both "stage-level" and "individual-level" uses of adjectival predicates with *bi*. With nominals, she uses a cleft construction with *is* for "individual-level" predicates, and the construction with *ann* for "stage-level" predicates.
For example:

i.	*'s*	*e*	*dotair*	*a*	*th'*	*ann an*	*Alaig.*
	cop.PRES	3	doctor	WH_COMP	be.PRES	in	Alec

'Alec is a doctor.'

I do not give an analysis of any constructions using *is*, which my consultant does not use regularly.

- I will ultimately disagree with Cram that *ann*+pro is functioning syntactically as an aspect particle
- I have very different reasons for why adjectival and prepositional predicates do not require *ann*, while nominal ones do
- I present an explanation for the "stative" versus "dynamic" readings with *ann* and *a'*

- **Ramchand (1993)** mentions *ann* briefly in its use with verbal nouns

  - Notes that it can be used with the possessive pronoun "to convert a verb of [the V_{plural}] type into a predication which expresses a state" (p. 255)[5]

  - In the framework she is working in (based on Verkuyl 1972 and Krifka 1989, 1992), "this construction is found whenever a single predicative location, as opposed to a full 'path' is to be constructed as the meaning of the AspP, and always gives rise to stative predication" (p. 256)

2 Predication with *ann*

- Below I present the patterns of data for which I am providing an analysis. I often refer to "verbs" versus "nouns"; this is shorthand for "predicates with roots that usually become [verbs or nouns]", since I am arguing that syntactically with *ann*+pro these are all Ns.

2.1 "Verbal" predication

- As we have seen, the basic pattern for sentences with *ann*+pro is as follows:

(11) *Tha* *mi* *'nam* *sheasamh.*
be.PRES 1S ANN.PRO.1s stand.VN
'I am standing.'

- While the other aspectual particles (including the imperfective) can generally appear with all verbs, *ann*+pro can only appear with a handful

- For my consultant, they are as follows (in their citation forms): *suidh* 'sit', *seas* 'stand', *laigh* 'lie (down), recline', *sìn* 'stretch/reach', *caidil* 'sleep', *dùisg* 'wake', *stad* 'stop/stay/stand/rest', *tàmh* 'rest, stay', *caithris* 'keep watch by night', and, somewhat oddly, *ruith* 'run'.[6]

- Like the rest of the verbs in the language, these can also appear with the imperfective particle *a'/ag*.

- For these verbs, however, there is an interesting opposition between their use with *a'* and their use with *ann+pro*: with *ann+*pro, the verbs are interpreted statively (or positionally); with *a'* they are interpreted actively/dynamically

[5] She mentions it again in its use with nominals in Ramchand (1996).
[6] Note www.akerbeltz.org also gives *breislich* 'be confused', *faireachadh* 'be conscious, awake', *gurraban* 'be crouched (down)' and *tost* 'be silent/still'. These my consultant does not recognize but generally agrees that if she had these words in her vocabulary, that they would make sense with the construction.

- The interpretations of each verb (taken from Reed 2011, with modifications):

(12) *Bha e 'na shuidhe.*
be.PAST 3SM ANN.PRO.3SM sit.VN
'He was seated/sitting.' [position]

(13) *Bha e a' suidhe*.
be.PAST 3SM A' sit.VN
'He was sitting down.' [process]

(14) *Bha e 'na sheasamh*.
'He was standing.' [position]

(15) *Bha e a' seasamh*.
'He was standing up.' [process]

(16) *Bha e 'na laighe*.
'He was lying down.' [position]

(17) *Bha e a' laighe*.
'He was lying down.' [process]

(18) *Bha e 'na shìneadh*.
'He was stretched out.' [e.g., in bed]

(19) *Bha e a' sìneadh*.
'He was stretching out.' [e.g., his hand, or himself in bed]

(20) *Bha e 'na chadal*.
'He was asleep.'

(21) *Bha e a' cadal*.
'He was sleeping.' [7]

(22) *Bha e 'na dhùisg.*
'He was awake.'

(23) *Bha e a' dùisg.*
'He was waking up.'

(24) *Bha e 'na stad.*
'He was stopped.'

(25) *Bha e a' stad.*
'He was stopping.'

(26) *Bha e 'na thàmh.*
'He was hanging out/resting.'

(27) *#Bha e a' tàmh.*
[Would not use with this verb]

[7] One that doesn't quite follow the static/dynamic pattern is *caidil* 'sleep', for which we might expect to find meanings like "being asleep" vs. "falling asleep"; however, both mean much the same thing for my consultant (as 'be asleep'/'be sleeping' do in English); the inchoative meaning 'fall asleep' is expressed with the Gaelic verb for 'fall'.

(28) *Bha e 'na chaithris.*
'He was up all night (keeping watch).'

(29) *#Bha e a' caithris.*
[Would not use with this verb]

(30) *Bha e 'na ruith.*
'He was [in a state of] running.'

(31) *Bha e a' ruith.*
'He was running.'

- Ramchand (1993, p. 257) also presents the following data for *ruith* 'run' (I leave her examples as-is):

(32)

Bha	*abhainn*	*a'* *ruith*	*seachad.*
Be-PAST	river	*ag* run-VNOUN	past

"A river ran past."

(33)

Bha	*abhainn*	*na*	*ruith*	*seachad.*
Be-PAST	river	*in+its*	run-VNOUN	past

"A river ran past."
(p. 257, ex. 46-47)

- Ramchand cites these as having the same meaning

- For my consultant, (33) is not acceptable except in a particular circumstance.

- First, with an agentive subject, she can use either *ann+pro* or *ag*, and it gives basically the same meaning ('be running'), but with an important difference.

- Both can be uttered on seeing a man running by outside, regardless of whether he usually runs, is running because he is late, is part of a race, etc. However, take the following dialogue:

(34) First person: How is John getting to town? He has to be back in twenty minutes. He's not walking, is he?
Second person: [No,] he's running.

- In this case, only *tha e a' ruith*, and not *tha e 'na ruith* would be acceptable as an answer to the question

- When the action is specifically a process (as here, where the focus is on the action of running itself), *ann+*pro is disallowed

- As for rivers running, my consultant uses *a'* for the river in its habitual flow (*a'* is the usual way to make habituals in the present tense):

(35) *Tha* *abhainn* *a'* *ruith* *troimhn* *a'* *bhaile.*
be.PRES river A' run.VN through the.DAT.SM town
'A river runs through the town.'

- The same sentence with *ann+*pro is anomalous for this reading, but does give one interesting reading, glossed by my consultant with the English progressive:

(36) ?*Tha* *abhainn* *'na* *ruith* *troimhn* *a'* *bhaile.*
be.PRES river ANN.PRO.3sm run.VN through the.DAT.SM town
?'A river is running through the town.'

- The only time this would be an acceptable sentence is the same kind of situation in which the English gloss would be acceptable—for instance, if there is a flood, and the river has jumped its banks and is now flowing through the streets (or perhaps there is not usually a river at all, and it's just that the streets have been turned into a river). (Dowty 1979, p. 175 points out these facts for English.)

- These data support my claim that *ann+*pro only results in Roy's (2013) "non-maximal" (non-defining) interpretations.

- Note that there is not an animacy restriction involved with the *ann+*pro construction *per se*:[8]

(37) *Bha* *an* *car* *'na* *stad* *aig an* *t-solas.*
be.PAST the.SM car ANN.PRO.3SM stop.VN at the.SM light
'The car was stopped at the stoplight.'

(38) *Bha* *mise* *'nam* *stad* *aig an* *t-solas.*
be.PAST 1S.EMPH ANN.PRO.1S stop.VN at the.SM light
'I was stopped at the stoplight.'

(39) *Tha* *an* *bocsa* *'na* *sheasamh an* *sin.*
be.PRES the.SM box ANN.PRO.3SM stand.VN the.SM MED
'The box is standing there.'

- The construction can also appear in the future tense, as well as in combination with perfect and prospective aspects (with another verb 'be'):

(40) *Bithidh* *mi* *'nam* *sheasamh*.
be.FUT 1S ANN.PRO.1S stand.VN
'I will be standing.'

(41) *Tha* *mi* *air* *a* *bhith* *'nam* *sheasamh fad an* *latha.*
be.PRES 1S AIR AGRO be.VN ANN.PRO.1S stand.VN all the.SM day
'I have been standing all day.'

[8] See e.g. Folli & Harley's (2008) concept of teleological capability

(42) *Tha mi as dèidh bhith 'nam sheasamh.*
be.PRES 1S AS DÈIDH be.VN ANN.PRO.1S stand.VN
'I've just [/recently] been standing.'

(43) *Tha mi gu bhith 'nam sheasamh.*
be.PRES 1S GU be.VN ANN.PRO.1S stand.VN
'I'm about to stand [to be standing/to stand for a while].'

- Combination with imperfective *a'* does not yield a grammatical sentence:

(44) **Tha mi a' bhith 'nam sheasamh.*
be.PRES 1S A' be.VN ANN.PRO.1S stand.VN
*'I am being standing.'

- Finally, *ann*+pro does not occur with 'true' statives like 'know', 'resemble', 'like', or 'weigh'. With these predicates, either a copular construction using *is* or an adjectival or prepositional predicate is used (or simply *a'*).

(45) *'S aithne dhomh Màiri.*
COP.PRES knowledge/acquaintance to.1S Màiri
'I know Màiri.'

(46) *Tha mi eòlach air Màiri.*
be.PRES 1S acquaintance on Màiri
'I know Màiri.'

(47) *Tha Calum coltach ri Iain.*
be.PRES Calum similar to Iain
'Calum resembles Iain.'

(48) *Is toigh le Calum Màiri.*
COP.PRES agreeable with Calum Màiri
'Calum likes Màiri.'

(49) *Tha a' chaora sin ceud punnd de chuideam.*
be.PRES the.SF sheep MED 100 pound of weight
'That sheep weighs 100 pounds.'

(50) *Tha mi a'/(*'nam) cluinntinn.*
be.PRES 1S A'/ANN.PRO.1S hear.VN
'I hear.'

- So far, all the data we have seen is consistent with *ann*+pro occurring with what I will term homogeneous, non-maximal predicates.

2.1.1 The verbal class

- This collection of verbs seems to be semi-coherent in an intuitive way; many of the verbs involve positions or states of the body.
- Levin (1993) lists 'sit', 'stand', 'lie', 'stretch/reach', 'stop', and 'rest' in English in her "verbs of spatial configuration" in their positional/stative uses, and "verbs of assuming a position" in their process uses.
- My consultant glosses *caithris* 'keep watch by night' with *ann+*pro as 'stay up all night, for watching over a sick person, or a crying baby, etc.'—keeping or staying, plus extra lexical information
- Then we have 'sleep' and 'wake', which involve bodily states rather than positions
- 'Run' seems to be the odd man out. More on this in the analysis.

2.2 Nominal predication

- The use of *ann+*pro with nominals is far more widespread than its use with (roots otherwise usually categorized as) verbs
- In the current analysis, this is explainable because nominal predicates are being made out of roots with a homogeneous character, and few verbs have such an interpretation readily available
- In all the examples we will see, *ann*+pro is involved in sentences that are (after Roy) characterizing or situation-descriptive, rather than defining, and the predicates are homogeneous
- Most of the data presented so far involve animate subjects, but this is not a requirement for the construction. Masson (1882) gives a nominal use: "*nithear an tir 'n a fhasach* = the land will be made in its wilderness = the land will be laid waste" (p. 77); a similar sentence is fine for my consultant:

(51) *Tha* *an* *tìr* *'na* *fhàsach* *a-nis.*
be.PRES the.SM land ANN.PRO.3SM desert/wilderness now
'The land is a desert/wilderness now.'

- Then, *ann*+pro is the most common way to talk about someone's profession:

(52) *Tha* *Alaig* *'na* *dhotair.*
be.PRES Alaig ANN.PRO.3S doctor
'Alec is a doctor.'

(53) *Tha* *e* *'na* *shaor/* *thàillear/* *shagart/* *mhinistear /*
be.PRES 3SM ANN.PRO.3S carpenter/ tailor/ priest/ minister/
bhreitheamh/ *sgoilear.*
judge/ scholar
'He is a carpenter/tailor/priest/minister/judge/scholar.'

- We can also see the pattern that has been described as stage-level vs. individual-level predication, but which I will call non-defining/non-maximal vs. defining/maximal

- For instance, (54) and (55) are fine since it is clear from modification that a particular situation is being described (being in one's girlhood), while attempts at defining interpretations are out (56, 57).

- Note that, for instance, (57) becomes fine if put in the past, because it turns the predicate into a description of a situation, just as in (54).

(54) *Nuair a* *bha* *mi* *'nam* *nighean* *cha* *robh*
when be.PAST 1S ANN.PRO.1S girl not be.PAST.DEP
telebhisean *ann.*
television in.3SM
'When I was a girl, there was no television.'

(55) *Chan* *e* *pàisde a* *th'* *innte* *idir,* *tha* *i*
not 3SM child WH_COMP be.PRES in.3sf at all be.PRES 3SF
'na *boireannach* *a-nisde.*
ANN.PRO.3S woman now
'It's not a child that she is at all—she's a woman now.'

(56) #*Tha* *e* *'na* *gille*.
be.PRES 3SM ANN.PRO.3s boy
#'He is a boy [i.e., male child].'

(57) *#Tha* *i* *'na* *boireannach.*
be.PRES 3SF ANN.PRO.3S woman
#'She is a woman [i.e., female adult].'

- We can also see the distinction between the cleft construction (for my consultant; or the bare copular construction in traditional descriptions) and the *ann+*pro construction; these are sometimes subtle.

- For instance, Cram (1983) presents the construction with the noun 'Englishman'. My consultant prefers the cleft construction for the basic predication (i.e., a maximal/defining interpretation):

(58) *'s* *e* *Sasannach* *a* *th'* *ann a* *Lachy.*
cop.PRES 3SM Englishman WH_COMP be.PRES in.3SM Lachy
'Lachy is English/an Englishman.'

- She accepts the construction with *ann+*pro, but reports that it sounds like a response to something else, not just a statement of his nationality—as if to say "yeah, but he's *English*"—no longer a maximal interpretation.

- This is precisely in line with my claim that *ann*+pro appears with characterizing predicates—the focus here is on *what* Lachy is, not on *who* he is.

(59) *Tha* *Lachy* *'na* *Shasannach.*
be.PRES Lachy ANN.PRO.3S Englishman
'Lachy is an *Englishman*/ is *English*.'

- The *ann+*pro construction (and not the cleft construction) can also be used in a situation-descriptive sentence, as in the following situation: Lachy is was born and raised in Scotland, but he has some English relatives, and likes to trot out his English accent at parties. In this case, (58) above would not be true, but one could say:

(60) *Seall—* *tha* *Lachy* *'na* *Shasannach* *an-dràsda.*
look.IMP be.PRES Lachy ANN.PRO.3S Englishman now
'Look—Lachy's [being] English/doing his Englishman (impression) now.'

- A final pair of rather subtle data points also demonstrate that the copular construction is used for defining/maximal interpretations, while *ann+*pro is used for characterizing ones

- Here imagine that you are again at a party, and you notice that across the room, there is a man you don't know looking into the throat of the host's son, using a tongue depressor and penlight. Not knowing this man, you turn to the boy's mother (who is standing next to you) and express concern. She reassures you:

(61) *'s* *e* *dotair* *a* *th'* *ann.*
COP.PRES 3SM doctor WH_COMP be.PRES in.3S
'He's a doctor.'

She does not say:

(62) *#Tha* *e* *'na* *dhotair.*
be.PRES 3SM ANN.PRO.3S doctor
#'He's a doctor.'

- This seems to be a clear case of a situation in which a characterizing predicate is not appropriate, but a defining one is—the boy's mother is reassuring you by asserting that this man is a member of the class of doctors (Roy's description of defining predicates), rather than by merely ascribing a property to him

- Another example of the difference between the cleft construction and *ann+*pro can be seen in examples with a locational modifier. With the basic sentence, either construction is acceptable. However, only the cleft construction can answer "Who is Alaig?", while either can answer "What does Alaig do?"

(63) a. *Cò* *Alaig?*
who Alaig
'Who is Alaig?'

b. ✓*'s e dotair a th' ann an Alaig ann an Glaschu.*
cop.PRES 3SM doctor WH_COMP be.PRES in.3S Alec in Glasgow
'Alaig is a doctor in Glasgow.'

c. #*Tha Alaig 'na dhotair ann an Glaschu.*
be.PRES Alaig ANN.PRO.3SM doctor in Glasgow
'Alaig is a doctor in Glasgow.'

(64) a. *Dè an obair a tha aig Alaig?*
what the.SM work WH_COMP be.PRES at Alaig?
'What work does Alaig have/what is Alaig's job?'

b. ✓*'s e dotair a th' ann an Alaig ann an Glaschu.*

c. ✓*Tha Alaig 'na dhotair ann an Glaschu.*

- *Ann*+pro is also infelicitous with predicates that are prototypically individual-level—or, here, defining—and thus difficult to get a characterizing reading for.

(65) *#Tha e 'na chealgair.*
be.PRES 3SM ANN.PRO.3SM cheater
#'He is a cheater.'

(66) *#Tha e 'na fhìrean.*
be.PRES 3SM ANN.PRO.3SM righteous.person
#'He is a righteous man.'

(67) *#Tha e 'na ghealtair.*
be.PRES 3SM ANN.PRO.3SM coward
#'He is a coward.'

- These data all support my claim that *ann*+pro is appearing consistently with non-defining, homogeneous predicates

- It seems so far that the predicates are either nominal or verbal; I argue that they are all nominal syntactically

- If my claims (and Roy's, and Ramchand's, and Adger's) are correct about why *ann*+pro appears with NPs (namely, as a repair strategy), then we want to make sure it does not appear with adjectival or prepositional predicates.

2.3 Prohibition with adjectival and prepositional predicates

- As we have seen, *ann+*pro occurs with what seem to be both nominal and verbal predicates, and that the resulting sentences are interpreted as characterizing or situation-descriptive rather than defining

- However, adjectival predicates never appear with *ann*+pro, regardless of the intended interpretation:

(68) **Tha* *Alaig* *'na* *chòir.*
be.PRES Alaig ANN.PRO.3SM kind/honorable/noble
*[Intended: Alaig is honorable.]

(69) **Tha* *Alaig* *'na* *choibhneil.*
be.PRES Alaig ANN.PRO.3SM kind
*[Intended: Alaig is kind.]

(70) **Tha* *e* *'na* *còir* *an-diugh.*
be.PRES 3SM ANN.PRO.3SM kind/honorable/noble today
*[Intended: Alaig is being honorable today.]

(71) **Tha* *Alaig* *'na* *sgìth.*
be.PRES Alaig ANN.PRO.3SM tired
*[Intended: Alaig is tired.]

- Nor is *ann+pro* allowed with PP predicates:

(72) *Tha* *Lachy* *(*na)* *anns* *a'* *chùl.*
be.PRES Lachy ANN.PRO.3SM in.the the.DAT.SM back
'Lachy is in the back [e.g. of the house, store].'

- The *ann+pro* construction, then, is limited to nominal complements—either nouns or "verbal noun" forms.

- This is to be expected, as I analyze *ann*+pro as heading a prepositional phrase, and prepositions take nominal complements.

- In my syntactic analysis, I cite Carnie's (2011) treatment of verbal nouns in Irish and claim that the verbal noun forms in SG are similarly of "mixed category"; i.e., the verbal noun morphology can mark either tenseless verbs or nominals. Under *ann*+pro, then, they are nominal.

- *Ann*+pro is a repair strategy to form nominal predicates because nominals do not bring an eventuality argument to be bound, so it appears with both nouns like 'doctor' and those like '(a) sitting'.

3 Tools for analyzing *ann*

- Analysis of the construction is generally from the perspective of events (Davidson 1967a and much work forward)
- Borrowings from tense logic (focusing on points of time and intervals; e.g. Bennett & Partee 1977, Taylor 1977, Dowty 1979)
- Working with an event-friendly version of Bennett & Partee's (1972/1978) Subinterval Property (as discussed by Taylor 1977, Dowty 1979, and Bach 1986)

- We are concerned with where verbs like 'sleep', 'stand', 'lie', 'sit', 'wake', etc. fit into the stative-eventive picture, and with how to characterize the nouns we see appearing with the construction

3.1 States, events, and intervals

- Subinterval property (Bennett & Partee 1972/1978)
    - Subinterval verb phrases
      "have the property that if they are the main verb phrase of a sentence which is true at some interval of time I, then the sentence is true at every subinterval of I including every moment of time in I. Examples…are: *walk, breathe, walk in the park, push a cart*" (p. 72).
    - So the 'subinterval property' is true to the moment level, and is true of activity verbs
    - Not discussed: whether their 'stative' verbs have the subinterval property
    - Nothing about the stative category would preclude the subinterval property from holding
- Taylor's (1977) important observation about the subinterval property:
    - States have it but some activities do not
      "…although at each moment *m* within *P* it is true to say that Rod *is chuckling* and *is pulling a pint*, it is plausible to hold that no moment within *P* can be a time *of* Rod's chuckling or of his pulling a pint; for both pulling pints and chuckling take time in a way in which being hirsute does not" (p. 206).
    - Verbs like *chuckle* are *heterogeneous* because they do not hold at the moment level; verbs like *fall* are *homogenous*
- Dowty (1979) addresses (among other things)
    - "'stative' verbs in the progressive tense"—verbs like *sit*, *lie*, *flow*, etc.—but with non-agentive subjects (as in, 'The book is lying on the table')
    - an alternation between the progressive and non-progressive in locative constructions with some of these verbs; for instance (as we saw in SG):

(73) a. The river flows through the center of town.
b. (?) The river is flowing through the center of town.
(Dowty 1979, p. 175, ex. 70)

- Maienborn (2005)
    - "true" states, different in some way—either they have a different eventuality argument, or no eventuality argument, or a different syntactic structure;
    - mid-way states like the positional readings of 'sit' and 'stand';
    - "true" events
    - all "states" ('true' states and her "D-states", namely, 'sit', 'stand', 'gleam', and others) have the subinterval property at the moment level

3.1.1 Gaps within intervals

- Dowty (1977), Filip (1999), and others have pointed out that for most activities, we can say something like 'I *e*'d for an hour [or a week]', without *e* actually being true of each moment

- Probably two kinds of gap[9]: real-world interruptions vs. what the action of the predicate can be broken down into

- Consensus re: telic predicates—not homogeneous at all; no subintervals of building a house that are themselves instances of build-a-house

- Less agreement about activities; Vendler notes (p. 22) that an activity like running can be broken down into a series of movements of the body, none of which are, in and of themselves, instances of running

- I agree with Dowty (1979) that there are probably not any activity verbs that can really be said to be homogeneous in this way
- I assume with previous work that 'true' states are homogeneous to the moment level

- I claim (after Maienborn) that our more event-like states are, too
  - Every moment of sitting (that is, being in a seated position) is sitting, every moment of sleeping is sleeping, etc.

3.1.2 My formal approach to intervals

- Interval: a section of the timeline that can be bounded by another interval (after Dowty 1979)
- The timeline is dense, meaning every interval has a subinterval
- I take an eventuality to have a "run time" that is the period of time during which the eventuality is going on

- I assume a Bennett & Partee-based concept of intervals.

  - I use $\prec$ and $\succ$ for 'precedes' and 'follows' and $\preccurlyeq$ and $\succcurlyeq$ for 'precedes or is identical with' and 'follows or is identical with', respectively.
  - *T* is the set of all times.
  - I assume a dense ordered T, that is, for all $t_1, t_3 \in T$, if $t_1 \preccurlyeq t_3$ then there is some $t_2 \in T$ such that $t_1 \preccurlyeq t_2 \preccurlyeq t_3$.
  - An interval *I* is a set of moments[10] such that $I \subset T$ and for all t_1, t_2, t_3, if $t_1 \in I$ and $t_3 \in I$, and $t_1 \preccurlyeq t_2 \preccurlyeq t_3$, then $t_2 \in I$.
  - Intervals can be closed, with endpoints included: $[t_1, t_2]$, or bounded, with endpoints not included: (t_1, t_2).

[9] Krifka (1998) is concerned with a different type of gap, as found in *read the article*, where in the actual undertaking of the predicate, we may do seemingly anomalous things like read parts of the article more than once.
[10] I do not assert the existence of "moments" or "atoms" of times ontologically; however, I use the term "moment (of time)" in an intuitive sense (to mean, roughly, "an interval of sufficiently fine grain so as to count as the smallest perceptible").

- Then τ_e is Krifka's runtime function, and finally, P is a predicate of eventualities.

    - Homogeneity of a predicate:
    - *homogeneous (to the moment level) with respect to the predicate of times P* is true iff for any two event(ualities) e_1, e_2, if e_1 is a P event(uality) and e_2 is a subevent(uality) of e_1 (such that $\tau(e_2) \subset \tau(e_1)$), then e_2 is a P event(uality).
    - This is equivalent to saying, without events, that a predicate is homogeneous to the moment level over an interval I iff for all $t \in I$, $P(t) = 1$.

- I assume that predicates (i.e., descriptions of eventualities) are homogeneous or not, but that roots also contain some information that leads to either a natural interpretation as a homogeneous predicate, or as a heterogeneous one, or in some cases both.

3.2 Arguments and the classification of 'sit'/'stand'/'lie' verbs[11]

- Within event semantics, there is disagreement both as to which verbs count as stative, and as to whether statives contain an event argument

- Davidson (1967a) famously proposed underlying event arguments in sentences, and suggested that the presence of this argument distinguishes event sentences from state sentences

    - Some researchers since then (Katz 2000 notes Galton 1984, Löbner 1988, Herweg 1991 and Sandström 1993) have pursued this line of argumentation, keeping states free of Davidsonian arguments

    - Other researchers ("neo-Davidsonians", e.g. Parsons 1990) have postulated that state sentences have an underlying state argument, just as event sentences have an event argument[12]

- Although they have different interpretations of what the specific semantics of "true" states/statives are and which types of predicates really belong to the group, both Katz (2000) and Maienborn (2005, 2007) argue against a Davidsonian event argument for them
    - I am inclined to agree with this, although I do not take a strong stance in either direction in the current work

- In her argumentation about copula sentences, Maienborn (2005, 2007) addresses a group of verbs that includes verbs like 'sit', 'stand', 'lie', 'sleep', and 'gleam'

    - They pass tests for eventualities that 'true' statives don't, but also differ from activity/process verbs in that they seem to be more homogenous
    - She names these verbs "static eventualities" or "Davidsonian states" ("D-states"),

[11] Note that throughout this discussion I refer to 'sit'/'stand'/'lie' *verbs* or *predicates*, when in fact in the current analysis these are ending up as nominals that become predicates when they are embedded under a prepositional phrase. But since they also appear as verbs in the analytic past and future in SG, and are mostly verbs in English (not, e.g., *asleep*), I am loose with the terminology here.

[12] Kratzer (1995) proposes that only some states have event arguments – namely, stage-level states.

- I adopt Maienborn's idea that these particular states pattern with 'true' statives in that they at least are seen to be homogenous to the moment level, whereas processes are not
- She concludes that D-state verbs have a Davidsonian eventuality argument, like process and other event verbs (Roy 2006, 2013 also argues for Davidsonian arguments for these predicates)

- **My take:**
  - Our predicates do have Davidsonian eventuality arguments if anything does
  - 'True' statives are different from our predicates in some major way on this account
  - Our predicates as well as 'true' statives are homogeneous to the moment level

3.3 Roy's (2013) divisions for non-verbal predicates

- Roy's (2006, 2013) account of non-verbal predication reconsiders the traditional distinction between individual-level and stage-level predicates

- Roy argues that all predicates do have eventuality arguments (of some sort), so that verbal as well as non-verbal predicates are predicated of eventualities

- She establishes three types of non-verbal predicates:

  - *maximal*[13], producing *defining* sentences (they ascribe "a property salient enough to 'define' an individual as a particular member of a class of individuals" (2013, p. 37));
  - *non-dense*, producing *characterizing* sentences (they ascribe a property to an individual" (ibid.)),
  - *dense*, producing situation-descriptive sentences

- She locates the differences among these predicates in their internal structures (involving Classifier Phrases, Degree Phrases, PPs, and Number Phrases).

- Returning to our previous discussion of gaps, we can differentiate between such predicates as these:

- John is a doctor.
- John is on the table.

- The difference according to Roy:
  - For *John is a doctor* to be true at a time t, John does not need to be *being* a doctor at t—he does not need to be doing doctor-y things (this is *non-dense*)
  - For *John is on the table* to hold, John must actually be on the table at reference time (*dense*)

- Note that density is *not* the same as homogeneity[14]; homogeneity (as I'm defining it here) has to do with whether a predicate can be said to be true at a moment, while density is concerned with whether there has to be event-ing going on at every moment in order for the predicate to hold.

---

[13] "Maximal" refers to the fact that these describe an eventuality that is not part of a larger eventuality.

[14] Roy's definition of density is, I think, actually properly a definition of homogeneity if we are considering verbal predicates as well (which she is not, but which I wish to): "If a predicate P is interpreted as *dense*, then P is true of an eventuality *e* in an interval I if and only if for any I', a subinterval of I, there exists another eventuality *e'* such that P is true of *e'* and *e'* is part of *e*" (2013, p. 77).

- So, homogeneity asks whether a snapshot of a moment within an eventuality can really be said to be an instance of that eventuality itself;
- Density asks whether, in that snapshot, there has to be some amount of activity related to the eventuality actually going on

- For Irish, which shows patterns similar to those found in SG, she argues that copular sentences with the equivalent of the SG copula *is* involve maximal/defining defining predicates, while those with the equivalent of *bi* 'be' involve non-maximal predicates (non-dense/characterizing or dense/situation-descriptive).

- Applied to SG, this accounts for the kinds of phenomena that inspired the description of the *is*/*bi* contrast as being one of individual- vs. stage-level

- This is helpful to us since nominal predication with *bi* in SG does not necessarily lead to what we would want to call a stage-level predicate
  - For instance, the most common way to communicate someone's profession is with *bi+ann*+pro, not with *is* (or a cleft construction with *is*)
  - This is less like a typical stage/individual-level "temporary" vs. "permanent" distinction, and more like Roy's "characterizing" vs. "defining." We have seen that when a defining predicate is needed, the *is* (or cleft-*is*) construction is indeed used.[15]

3.4 The syntax of nominal predication in Scottish Gaelic

3.4.1 Roy's account of nominal predication

- Roy argues that there are different functional projections involved her three types of predicates;

  - Bare XPs lead to a dense interpretation, the addition of an embedding ClassifierP leads to a non-dense interpretation, and the addition on top of that of a NumberP leads to a maximal interpretation

- She argues that true bare NPs cannot be predicates—following Borer (2005a,b), she assumes that roots must be embedded under a structure to get their category; so for her, they must be under ClassP (alone or together with NumP) to become predicates
  - This would lead to a lack of dense construals with NPs, which she shows to be the case

- Importantly for us, she then argues that there are two ways for nominal predicates to be made:

  - "Nominals in copular sentences are either ClassPs, or are introduced by a functional head such as a P or a degree" (2013, p. 124).
  - I argue that this latter phenomenon is exactly what is happening in SG

[15] Her schema also gives an explanation for why we see tense, but not aspect, marked on defining predicates (as we find with *is*): "Predicates interpreted as maximal are compatible with simple tense markings on the copula…. They are, however, not compatible with any temporal distinctions that restrict the predicate to smaller intervals within the maximal interval I for which P is true." (2013, p. 45)

3.4.2 Adger's and Ramchand's accounts

- What we want to take away from Ramchand's (1996) and Adger & Ramchand's (2003) account(s) is that in SG, nominals cannot be predicates on their own, and must be embedded under a PP instead
- Ramchand (1996) shows that the copula *is* selects for NPs (and some AdjPs and PPs), but not VPs;
- *bi* does the opposite—it occurs with AdjPs, PPs, and VPs, but not NPs.
- Ramchand's explanation: *is* ascribes properties to individuals (which lines up nicely with Roy's idea of defining predicates), and that it thus cannot take predicates of events (and so VPs)
- Then she argues that DPs in SG are not predicates but referential projections
- This means *is* can select for them but *bi* (which selects for predicational projections) cannot. Instead, the PP construction with *ann* "saves" the otherwise illicit construction with *bi* + DP.[16]
- Roy says something similar: in defining sentences (i.e., with *is* in SG), there is no Asp—and Asp usually binds the event variable.
    - Instead, the Num head (which is present in predicates interpreted as defining) introduces a Max (for 'maximal') operator, and that binds the event variable
- For Adger & Ramchand (2003), the split between nominals and other categories is due to "a property of the functional structure under which the lexical root is embedded: the semantics of the functional structure selecting adjectival, prepositional, and verbal roots introduces eventuality variables, in contrast to the D-related functional projections selecting nominals" (p. 333).
- Thus, when a nominal predicate is desired in SG, the Pred head (or the Asp head, in my account) cannot bind an eventuality variable unless the NP is embedded under a prepositional head—so essentially, the preposition converts "the NP into a predicate with an appropriate variable position to bind" (p. 333).
- Roy, Ramchand, and Adger's accounts together provide us with the syntactic reasoning we need to understand the phenomena at hand.

4 Formal analysis of *ann*+pro

4.1 The syntax and semantics of *ann*+pro

- The story of *ann*+pro is really two interrelated stories: the syntax of how the pieces of this construction fit together, and the semantics of how the pieces involved (and not other pieces) get there in the first place.

[16] Of the pronoun, she says that "The fact that there is agreement on the predicational head 'in' here is further evidence that it and the 'subject'…are in a Spec,Head relationship" (p. 187). For Ramchand, DPs do not introduce event variables in their argument structures, while the other phrases do; this makes them referential rather than predicational (and *is* selects for referential projections).

4.1 Roots

- I assume that roots are acategorial (as argued for in various ways in, e.g., Borer 2005a, 2005b, and in the Distributed Morphology framework, e.g., Halle & Marantz 1993; Marantz 1997; Harley 2005), and gain their categories depending on the functional structures into which they are inserted
    - However, I also take it to be the case that roots are not completely void of meaning; rather, roots here are assumed to contain at least some sort of conceptual atoms that lead to their being able to be used in certain ways and not others by speakers.[17] These atoms may well include semantic types.
- What is easily noticeable once we are at the level of categories, however, is that roots inserted into P, A, and N/D material (if they can be predicates in a language) all end up as homogeneous descriptions of eventualities,
- While roots inserted into V material can end up as predicates that are either homogeneous to the moment level (e.g., statives) or not (e.g., activities, homogeneous to the interval level; achievements/accomplishments, heterogeneous)
- It also seems that some roots/lexical items cross-linguistically tend to be nouns, and some tend to be verbs, but that the lines are not in any way clear[18]
- Here I assume that a root inserted into verbal syntactic structure gets a verbal interpretation, which can include heterogeneity (e.g., eventive verbs) or homogeneity (e.g., stative verbs);
- A root inserted into a nominal, adjectival, or prepositional syntactic structure gets a nominal, adjectival, or prepositional interpretation, respectively, which can only be homogeneous[19]

4.1.2 Forming predicates in SG

- In SG, an acategorial root can be embedded within an AdjP, a VP, or a PP in order to become a predicate; but noun phrases in SG cannot be predicates on their own (after Ramchand 1996, Adger & Ramchand 2003 for SG, Roy 2013 for a cross-linguistic claim with data from Irish).
- To form a verbal predicate in SG, the root is embedded under a VP, and an overt Asp will both bind the eventuality and introduce a relation between reference and event time

[17] See e.g. Baker (2003), Acquaviva (2009) for views of how much information is in roots

[18] I am thinking along the lines of the following: roots with more heterogeneous meanings become verbal predicates, while less heterogeneous ones become other kinds of predicates. Then among those more homogeneous roots, descriptive roots tend to become adjectival predicates, predicative and equative roots tend to become nominal predicates (if possible), and locational roots tend to become prepositional predicates. Evidence for this in SG might be found in the stative "verbs" (in English) that are realized via adjectival or prepositional constructions (as in 54-56 above). This is obviously not precise enough to argue for cross-linguistically, but it is an interesting property of SG.

[19] This specification might come in at the head or the phrase level. I don't make a commitment here.

- To form a prepositional predicate, the root is embedded under a PP;

    - Asp is phonologically null and binds the eventuality but does not introduce a containment or precedence relation between RT and ET; instead, it equates the times (or perhaps coindexes them) so that there is a tense interpretation specified but no aspectual interpretation. The null Asp head has the following denotation (74):

(74) $[\![\varnothing]\!] = \lambda P_{(vt)}.\ \lambda t_{(i)}.\ \exists e: [t = \tau(e)\ \&\ P(e)]$

- Then, to create a nominal predicate, the root is inserted in nominal (N) structure, but this structure does not introduce an eventuality, and thus no predicate can result (Ramchand 1996, Adger & Ramchand 2003)

- This is resolved in one of two ways:

    - the copula *is* can select for the (non-predicative) nominal structure, or
    - the verb *bi* can select for a prepositional predicate (details below)

    - The copula *is* I take to be compatible with referential projections; if Roy (2013) is correct, a maximal interpretation is achieved with *is* because there is further structure—among other things, a NumP whose head introduces a *max* operator to bind the eventuality variable (instead of Asp)[20]

    - This matches the data with *is* in that there is no aspectual specification available in the sentences

    - In addition, as we have seen, sentences with the copula (which are mainly cleft constructions for my consultant) lead to maximal (defining) interpretations

    - The other strategy is for forming non-maximal predicates; the verb *bi* is used

        - But *bi* selects for predicates (Ramchand 1996), so nominals must be embedded under other structure before *bi* can select for them
        - SG uses embedding under a prepositional head (one of Roy's options) as a repair strategy
        - This kind of predication yields either non-dense (characterizing) or dense (situation-descriptive) interpretations, as we have seen

4.1.3 Syntactic structures

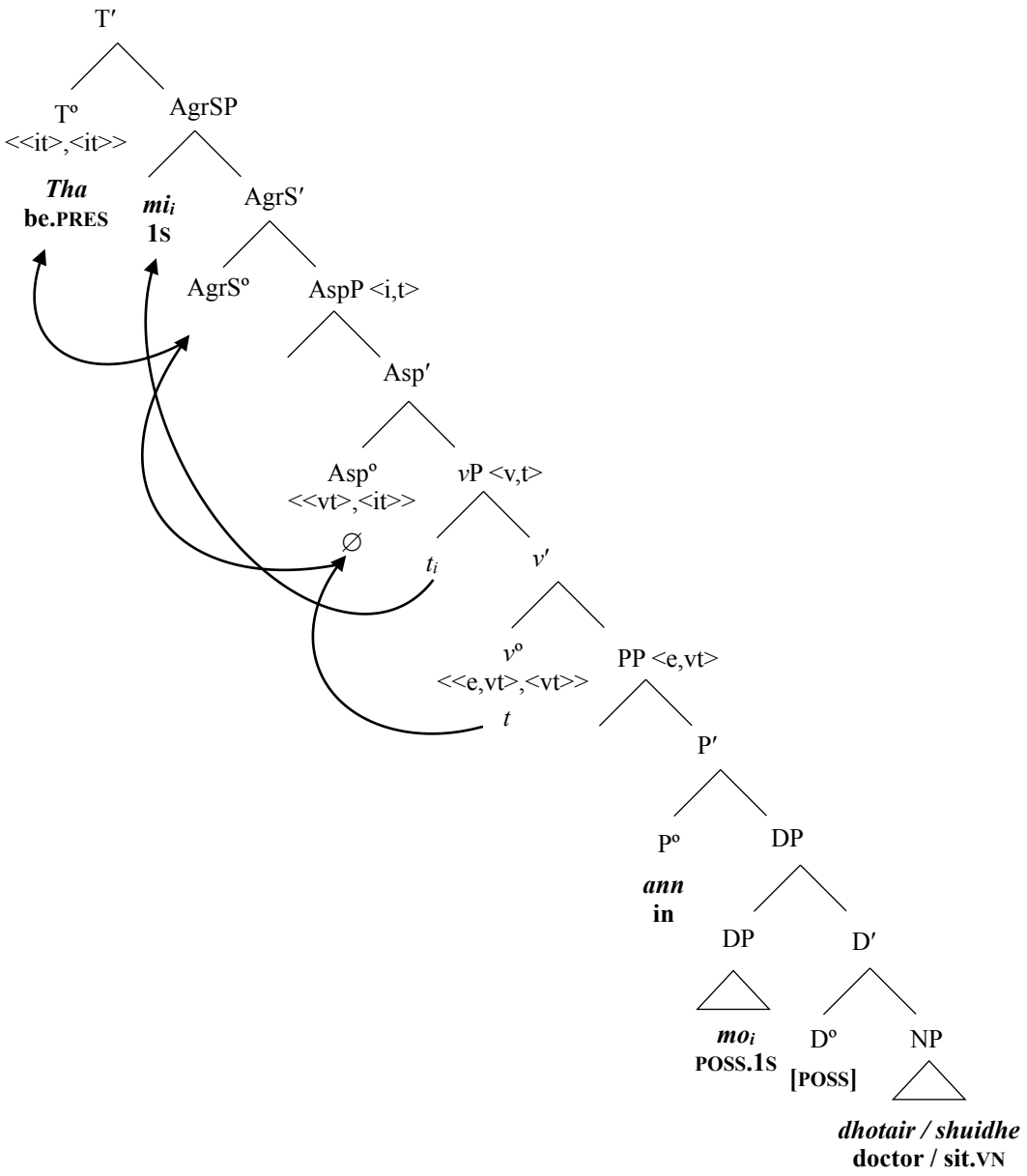
- I take both VPs and PPs to be of type <e,<vt>>; *v* composes with this predicative phrase either way[21]

[20] Chung and McCloskey (1987) and Carnie (1995) also offer possibilities for why a similar phenomenon is found in Irish.
[21] As well as AdjPs. Since I am not much discussing adjectives here I will often not mention them, but I assume that they function the same way as PPs.

- A VP like [hug John] entails the existence of an eventuality of hugging John; a PP like [in a bucket] entails the existence of an eventuality of being in a bucket.

- Sentences with the *ann*+pro construction are syntactically PPs, so the structure would be as in (75) for either a "noun" or "verbal noun" form (before fusion applies):[22]

(75) Structure of sentence with *ann*+pro



[22] We have seen that *'na* is derived from *ann a*. Operating within the Distributed Morphology framework, I assume that an operation of fusion would operate on the terminal nodes for the preposition and the pronoun, so that they are spelled out by the same morpheme.

4.1.4 *Ann*+pro with "verbal nouns"

- Turning to the "verbs" that appear with *ann*+pro, we have several questions:
  - why (and how) are forms that seem verbal appearing under a prepositional phrase;
  - why is it these roots and not others; and
  - why do they get the interpretation that they do (i.e., the positional interpretation rather than the moving-into-position interpretation).

- I propose that for this set of roots, there are two very natural and very different interpretations available, depending on whether the eventuality is taken to be homogeneous or heterogeneous (whether this dual meaning is in the root, or it is simply a cognitive fact that there are two ready interpretations).

- If we embed such a root under verbal structure, it could in theory get either a heterogeneous or a homogeneous interpretation

- In order to ensure a homogeneous interpretation, it needs to be a non-verbal predicate

- Whether it gets inserted under adjectival or nominal material I assume depends on the language (note, for instance, that English uses adjectives for several of its "positional" variants of these roots—e.g., *asleep*, *awake*, *stretched out*, etc.)

- SG chooses nominal material, and this leads to the desired homogeneous interpretation.

- Why the "verbal noun" form in both the verbal and the nominal instantiations of the root?

  - There is a long history of disagreement about the category of the 'verbal noun' in both SG and Irish (see e.g. Borsley 1993, 1997; Guilfoyle 1990; Carnie 2005, 2011)
  - I assume here that these forms are ambiguous between nominal and verbal forms, much like participial *–ing* forms in English, and that the morphology (*–amh*, *–adh*, etc.) can be the marker either of a tenseless verb, or of a nominalized form (see esp. Carnie 2011)

- Now we have a root in nominal material, which of course leads to the same situation as with the (more prototypically nominal) roots—NPs cannot be predicates (at the very least, in SG). So now the same repair strategy occurs and we again have an NP being embedded under a PP

The denotation for a sentence with *ann*+pro can now be given.

(76) a. *Tha* *Iain* *'na* *dhotair/sheasamh.*
be.PRES Iain ANN.PRO.3SM doctor/sit.VN
'Iain is a doctor/sitting.'

b. = $\exists t'$: [$t' = t_{now}$ & $\exists e$: [$\tau(e) = t'$ & [[[doctor/sit]](Iain)](e)]]

4.2 The *run* mystery solved

- We saw that with an animate subject, *ruith* can be used with either *a'* or *ann*+pro; if the action needs to be emphasized, *a'* had to be used, while *ann*+pro with *ruith* seemed to mean something like "on a run"

- However, when we looked at data with inanimate subjects (32-33), we saw that *a'* marked the typical flowing of a river, while *ann*+pro yielded a different interpretation (as if the river had overflowed its banks during a flood).[23]

- I claim that both with animate and with inanimate subjects, the contrast between *a' ruith* and *ann*+pro *ruith* is describable in the same terms that we have been using up to this point

- There seem to be three possible interpretations here
  - sentences describing situations (being on a run, a river flowing outside its usual path)
  - sentences describing an action (the action of a person running)
  - sentences describing the typical paths of a river and a road

- The situation-descriptive interpretations arise when *ruith* is under *ann*+pro, which fits with what we have been seeing with other predicates

- The reading focusing on the action of running arises under the imperfective particle *a'*

- With the paths of the river and road, we want something like a defining sentence, but we don't want to equate the river or road with a run (as would result from use of the copular construction)—we want to say that it exists along a particular path

  - That is, we want to predicate a state of the river or road
  - In SG, as we have seen, stative predicates are formed in several ways; some use adjectival/prepositional predicates, but many use *a'*.
  - This is what is happening in the path cases

4.3 The possessive pronoun

- But we are still missing a piece—the possessive pronoun
- There seem to be three questions here:
  - why is there a pronoun at all,
  - why is it subject-agreeing (recall that pronouns in this position with aspect particles are only ever object-agreeing, except for the case of obvious reflexives), and
  - why is it genitive

[23] In fact, it seems that this difference also applies to roads, as well:

(ii) *Thug sinn an rathad bho Port Rìgh gu Gleann Dail. Tha e a' ruith tro Dùn Bheagain*
take.PAST 1P the.SM road fromPort Righ to Glendale be.PRES 3SM A' run.VN through Dunvegan
's stad sinn ann sin airson dìnnear.
and stop.PAST 1P in.3SM MED for dinner
'We took the road from Portree to Glendale. It runs through Dunvegan and we stopped there for dinner.'

- I claim that the reason the pronoun is there (and subject-agreeing) is because there is need of an overt linker between the subject and the nominal

- I take this to be parallel to reflexives like *crane one's neck*/*hold one's breath*, in which the coindexation with the subject is obligatory

    - *I twisted his ankle* is fine, but **I held his breath* is out, due to the nature of what it means to hold breath in one's lungs (vs. twisting a joint, which is possible to do reflexively or to someone else)

(77) *Tha* *mi* *a'* *cumail* *m'/(*d')* *anail.*
be.PRES 1S A' hold.VN POSS.1S/POSS.2S breath
'I'm holding my/*your breath.'

(78) *Tha* *m'* *anail* *'nam/(*'nad)* *uchd.*
be.PRES POSS.1S breath ANN.PRO.1S/(*.2S) chest/lap
'I am out of breath.'
Lit.: 'My breath is in my/*your chest.'

- The pronoun also distinguishes a proposition like *it is a desert* from one like *it is in a desert:*

(79) a. *Tha* e_k *'na*$_k$ *fhàsach* *a-nis.*
be.PRES 3SM ANN.PRO.3SM desert/wilderness now
'It is a desert now.'

b. *Tha* *e* *ann am* *fhàsach* *a-nis.*
be.PRES 3SM in desert/wilderness now
'It/he is in a desert now.'

- This type of reflexive in both languages is differentiated from a more prototypically locational use of the preposition by this overt linking to the subject

- So the pronoun is really the reflex of an Agree relation, and there is only one theta role present

- This is supported by some slightly odd ungrammatical data with *a'* vs. *ann+*pro. First, the way to say 'I am sitting down [i.e., moving into a sitting position]' is in (81):

(80) *Tha* *mi* *a'* *suidhe.*
be.PRES 1S A' sit.VN
'I am sitting down.'

- If *a'* is inflected to agree with the subject, the sentence becomes ungrammatical:[24]

[24] The sentence is also ungrammatical if *a'* is inflected to agree with an intended object—that is, one cannot say 'I am at your sitting' to mean something like 'I'm sitting you down'. A similar meaning could be expressed with *cuir* 'put' (as to a small child):
iii. *Tha* *mi* *gad* *chuir* *sios.*
be.PRES 1S A'.POSS.2S put.VN down
'I am putting you down.'

(81) **Tha mi 'gam shuidhe.*
be.PRES 1S A'.POSS.1S sit.VN
*'I am sitting down.'

- However, my consultant reported that if an interpretation were needed for the sentence, it sounded like you were somehow outside yourself, picking yourself up and setting yourself on a chair—that is, the pronoun is interpreted as an object pronoun (something like "I am sitting me down")
    - That is, the interpretation is of a transitive verb with two theta roles

- With *ann*+pro, any agreement other than with the subject is ungrammatical:

(82) **Tha mi 'nad/ 'na/ 'na/ 'nar/ 'nur/ 'nan s(h)uidhe*.
be.PRES 1S ANN.PRO.2S/ 3SF/ 3SM/ 1P/ 2P/ 3P sit.VN
Lit.: 'I am in your/her/his/our/your/their sitting.'

- This agreement cannot be interpreted as object agreement. There is no way to construe the sentence such that, for instance, there is some kind of other-worldly possession going on; my consultant reports that it simply sounds like you don't know how to form your pronouns—it's an agreement error.

- So with *ann*+pro, a pronoun is base-generated in [Spec, DP] and coindexed with the subject, and genitive case (rather than accusative) is expected given its position.

5 Conclusion

- I have argued that *ann*+pro is part of SG's syntactic repair strategy for creating from ambiguous roots nominal predicates that are homogeneous to the moment level and non-defining/non-maximal. Roots inserted under N material get embedded under *ann*+pro when a characterizing or situation-descriptive reading is desired. This includes roots that typically become nouns, as well as a few roots that can easily become verbs as well—namely, verbs of bodily position or state.

- The account presented here solves several open questions about this construction.
    - In a picture of the difference between the copular construction and this one that assumes the difference to be a question of stage-level vs. individual-level, predicates like 'doctor' have to be categorized as stage level along with predicates like 'available', which is not ideal since the two seem different in an important way. In this account (after Roy) both are non-defining (non-maximal) predicates, but 'doctor' is (usually) "characterizing" while 'available' is (usually) "situation-descriptive".

    - Second, we have an account of why the "verbs" that participate in this construction, and not others, do so—these roots have two clear interpretations that hinge on whether the predicate is homogeneous or heterogeneous.[25] To ensure a homogeneous interpretation, these roots are embedded under nominal rather than verbal material.

[25] Placing this explanation in the root also allows for an explanation of why, for example, the verb *cónaí* 'live' in Irish participates in this construction, while *fuireach* 'stay/wait/live' in SG does not; and why *ruith* 'run' (*rith* in Irish) does, while it seems to fit less well (based on the English gloss) with the set of verbs.

- Third, we have an answer for why we see the subject-agreeing possessive pronoun. It is there and obligatorily agrees with the subject for the same reason as in certain reflexives in English and SG. The fact that genitive case is assigned (i.e., that there is a possessive pronoun and not an object pronoun showing up) falls out from the position of the pronoun in the structure.

- I leave for future work a few open questions, such as the exact semantics of *ann* 'in', a resolution to the question about perfective aspect with analytic verb forms, and where precisely in the syntax and semantics the homogeneity of PPs, AdjPs, and maybe NPs arises.

Abbreviations

The following abbreviations and symbols are used: ≺ fully precedes; ≼ fully precedes or reaches; ≻ fully succeeds; ≽ fully succeeds or reaches; < is less than; > is greater than; 1, 2, 3 first, second, third persons; A' imperfective aspect marker *a'/ag* ('at'); A' DOL A regular prospective aspect marker *a' dol a* ('going to'); ADV adverbializer; AIR regular perfect aspect marker *air* ('on'); AS DÈIDH restricted perfect aspect marker *as dèidh* ('after'); COMPAR comparative; COND conditional; COP copula; DAT dative; DECL_COMP declarative complementizer; DEP "dependent" verb form; DIST distal (*far*); EMPH emphatic; F feminine gender; FUT future tense; GEN genitive; GU restricted prospective aspect marker *gu* ('about to'); IMPFV imperfective aspect; M masculine gender; MED medial marker (*middle*); NEG_COMP negative complementizer; P plural number; PART particle; PASS passive voice; PAST past tense; PFV perfective aspect; POSS possessive; PRES present tense; PROX proximal marker (*close*); Q question particle; REL_FUT relative future verb form; S singular number; SG Scottish Gaelic; VN verbal noun form; WH_COMP wh-complementizer

Acknowledgments

Special thanks to Andrew Carnie, Heidi Harley, Bridget Copley (CNRS/ Université Paris 8), Roumyana Pancheva, Hamida Demirdache, and an anonymous reviewer for their helpful comments; and especially to Muriel Fisher for always enthusiastically sharing her knowledge of Scottish Gaelic. All mistakes herein, of course, are my own. Research funded in part by NSF #BCS0602768A; in part by a grant from the UA SBSRI. I was also funded by a scholarship from P.E.O. International during a portion of this research.

References

Acquaviva, Paolo. 2009. Roots and lexicality in Distributed Morphology. In *York-Essex Morphology Meeting 2*, ed. by Alexandra Galani, Daniel Redinger, and Norman Yeo, 1-21.

Adger, David, & Gillian Ramchand. 2003. Predication and Equation. *Linguistic Inquiry* 34.3: 325-359.

Asher, Nicholas. 1993. *Reference to Abstract Objects in Discourse*. Dordrecht: Kluwer Academic Publishers.

Asher, Nicholas. 2000. Truth conditional discourse semantics for parentheticals. *Journal of Semantics* 17.1: 31-50.

Bach, Emmon. 1986. The algebra of events. *Linguistics and Philosophy* 9.1: 5-16.

Baker, Mark C. 2003. *Lexical Categories: Verbs, Nouns, and Adjectives*. Cambridge: Cambridge University Press.

Bennett, Michael & Barbara Partee. 1972. *Toward the logic of tense and aspect in English*.

Bloomington: Indiana University Linguistics Club. Also published in Partee, Barbara, ed. 1978/2004. *Compositionality in Formal Semantics: Selected Papers*. Malden, MA: Blackwell Publishing, Ltd.

Borer, Hagit. 2005a. *Structuring Sense Volume I: In Name Only*. Oxford University Press, Oxford.

Borer, Hagit. 2005b. *Structuring Sense Volume II: The Normal Course of Events*. Oxford University Press, Oxford.

Borsley, Robert. 1993. On so-called 'verb-nouns' in Welsh. *Journal of Celtic Linguistics* 2: 35-64.

Borsley, Robert. 1997. Relative clauses and the theory of phrase structure. Linguistic Inquiry 28.4: 629-647.

Carlson, Greg N. 1977b. A unified analysis of the English bare plural. *Linguistics and Philosophy* 1: 413-58.

Carnie, Andrew. 1995. *Non-Verbal Predication and Head-Movement.* MIT, Cambridge, MA dissertation.

Carnie, Andrew. 2011. Mixed categories in Irish. *Lingua* 121: 1207-1224.

Cram, David. 1983. Scottish Gaelic ANN as an aspect particle. *Studia Celtica* 18: 311-326.

Davidson, Donald. 1967a. The logical form of action sentences. In *The Logic of Decision and Action*, ed. Nicholas Rescher, 81-95. Pittsburgh, PA: University of Pittsburgh Press.

Dölling, Johannes. 1999. Kopulasätze als Zustandsbeschreibungen. *ZAS Papers in Linguistics* 14: 95-122.

Dowty, David. 1979. *Word meaning and Montague Grammar*. Dordrecht: Reidel.

Filip, Hana. 1999. *Aspect, Eventuality Types and Nominal Reference*. New York: Garland.

Folli, Raffaella, & Heidi Harley. 2008. Teleology and animacy in external arguments. *Lingua* 118.2: 190-202.

Galton, Antony. 1984. *The Logic of Aspect*. Oxford: Clarendon Press.

Guilfoyle, Eithne. 1990. *Functional Categories and Phrase Structure Parameters*. McGill University, Montreal, Quebec dissertation.

Halle, Morris, & Alec Marantz. 1993. Distributed Morphology and the Pieces of Inflection. In *The View from Building 20*, eds. Kenneth Hale and S. Jay Keyser, 111-176. Cambridge, MA: MIT Press.

Harley, H. 2005 One-replacement, unaccusativity, acategorial roots and Bare Phrase Structure. *Harvard Working Papers on Linguistics*. Vol. 9, ed. S. Gorbachov & A. Nevins.

Herweg, Michael. 1991. Perfective and imperfective aspect and the theory of events and states. *Linguistics* 29, 969-1010.

Higginbotham, James. 1983. The logic of perceptual reports: An extensional alternative to situation semantics. *The Journal of Philosophy* 80.2: 100-127.

Higginbotham, James. 1996. Perception sentences revisited. Oxford University, ms.

Katz, Graham. 2000. Anti Neo-Davidsonianism: Against a Davidsonian semantics for state sentences. In *Events as Grammatical Objects*, Carol Tenny and James Pustejovsky (eds.), 393-416. Stanford, CA: CSLI Publications.

Kim, Jaegwon. 1976. Events as property exemplifications. In *Action Theory: Proceedings of the Winnipeg Conference on Human Action*, ed. M. Brand and D. Walton, 159-177. Dordrecht: Reidel.

Kratzer, Angelika. 1995. Stage-level and individual-level predicates. In *The Generic Book*, eds. Gregory N. Carlson & Francis Jeffry Pelletier, 125-175. Chicago: University of Chicago Press.

Krifka, Manfred. 1989. Nominal reference, temporal constitution and quantification in event semantics. In *Semantics and Contextual Expression*, eds. R. Bartsch, J. v. Benthem & P. v. E. Boas, 75-115. Dordrecht: Foris.

Krifka, Manfred. 1992. Thematic relations as links between nominal reference and temporal constitution. In *Lexical Matters*, eds. I. Sag and A. Szabolcsi. Stanford: Center for the Study of Language and Information.

Krifka, Manfred. 1998. The origins of telicity. In *Events and Grammar*, ed. Susan Rothstein, 197-235. Dordrecht: Kluwer Academic Publishers.

Lamb, William. 2001. *Scottish Gaelic*. München: Lincom Europa.

Levin, Beth. 1993. *English verb classes: A preliminary investigation*. Chicago: University of Chicago Press.

Löbner, Sebastian. 1988. Ansätze zu einer integralen semantischen Theorie von Tempus, Aspekt, und Aktionsarten. In *Temporalsemantik. Beiträge zur Linguistik der Zeitreferenz*, eds. Veronika Ehrich & Hans Vater. Tübingen: Niemeyer.

Maienborn, Claudia. 2005. On the limits of the Davidsonian approach: The case of copula sentences. *Theoretical Linguistics* 31, 275-316.

Maienborn, Claudia. 2007. On Davidsonian and Kimian states. In *Existence: Semantics and Syntax*, ed. Ileana Comorovski and Klaus von Heusinger, 107-128.

Marantz, Alec. 1997. No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon. In *University of Pennsylvania Working Papers in Linguistics*, Vol. 4.2, eds. A. Dimitriadis, L. Siegel, et al., 201-225.

Masson, Donald. 1882. *Vestigia Celtica: Celtic Footprints in Philology, Ethics, and Religion*. Edinburgh: Maclachlan and Stewart.

McCloskey, Jim, & Kenneth Hale. 1984. On the syntax of person-number inflection in Modern Irish. *Natural Language and Linguistic Theory* 1: 487-533.

Milsark, Gary L. 1974. Existential Sentences in English. MIT, Cambridge, MA dissertation.

Ramchand, Gillian. 1993. *Aspect and Argument Structure in Modern Scottish Gaelic*. Stanford University, Stanford, CA dissertation.

Ramchand, Gillian. 1996. Two subject positions in Scottish Gaelic: The syntax-semantics interface. *Natural Language Semantics* 4: 165-191.

Reed, Sylvia L. 2011. The semantics of Scottish Gaelic tense and aspect. In *Formal Approaches to Celtic Linguistics*, ed. by Andrew Carnie, 255-282. Newcastle: Cambridge Scholars Press.

Roy, Isabelle Anaïs. 2006. *Non-Verbal Predications: A Syntactic Analysis Of Predicational Copular Sentences*. University of Southern California, Los Angeles dissertation.

Roy, Isabelle Anaïs. 2013. *Non-verbal Predications: Predicational copular sentences at the syntax-semantics interface*. Oxford: Clarendon Press.

Sandstrøm, Gorel. 1993. *When-clauses and the temporal interpretation of narrative discourse*. University of Umeå dissertation.

Siegel, Muffy. 1976. *Capturing the Adjective*. Garland Publishing, New York.

Taylor, Barry. 1977. Tense and continuity. *Linguistics and Philosophy* 1.2: 199-220.

Vendler, Zeno. 1967. *Linguistics in Philosophy*. Ithaca, NY: Cornell University Press.

Verkuyl, Henk. 1972. *On the Compositional Nature of the Aspects*. Dordrecht: Reidel.

Zelinsky-Wibbelt, Cornelia. 1993. *The semantics of Prepositions: From Mental Processing to Natural Language Processing*. New York: Mouton de Gruyter.

Zwarts, Joost. 1997. Vectors as relative positions: A compositional semantics of modified PPs. *Journal of Semantics* 14: 57-86.

Zwarts, Joost, & Yoad Winter. 2000. Vector space semantics: A model-theoretic analysis of locative prepositions. *Journal of Logic, Language, and Information* 9: 169-211.