# The Syntax of the Scottish Gaelic Prospective Aspect* <br> Andrew Carnie, University of Arizona <br> Sylvia Schreiner, University of Illinois, Urbana Champaign <br> Contrast in Syntax Workshop, University of Toronto, April 25, 2015 

## 0. Introduction

1) Tha mi $a^{\prime}$ dol $a^{L^{2}} d h^{\prime}$ ithe cèic. be.PRES I PROSP eat.VN cake "I'm going to eat cake."

## Main Points of this presentation:

- I demonstrate that this construction exhibits an unrestricted prospective meaning: it represents a prospective aspectual distinction that locates an event time fully after reference time-that is, reference time fully precedes event time
- I contrast this with a different construction (gu) that expresses a restricted near-prospective interpretation
- I demonstrate that this apparently multi-morphemic biclausal structure has been grammaticalized into a single syntactic head, plausibly equivalent to Cowper (1998)'s Asp head.
a. [Tp [ T Tha] [Agrsp mi [AspP [Asp $\mathrm{a}^{\prime}$ dol $\left.\mathrm{a}^{\mathrm{L}}\right][\mathrm{vp}[\mathrm{vp} \mathrm{dh}$ ithe cèic]]]]]
- Coded as two features dependent on Precedence.



### 1.0 Some background on SG Tense and Aspect Morphology

2) Gaelic Tense:

Regular Verbs ("fuirich" wait)

|  | Past | Present | Future/Habitual |
| :--- | :--- | :--- | :--- |
| Independent | Dh'fhuirich | --- | Fuirichidh |
| Dependent | Cha do dh'fhuirich | --- | Chan fhuirich/Ma fhuiricheas |

Verb Bith 'to be'

|  | Past | Present | Future/Habitual |
| :--- | :--- | :--- | :--- |
| Independent | Bha | Tha | Bithidh |
| Dependent | Cha robh | Chan eil/Am bheil | Cha bhi/Ma bhitheas |

[^0]3) Unmarked Perfective: Gaelic is like English (cf. Cowper 1998): Perfective aspect is unmarked, Imperfective is marked (Reed 2012)
4) Morphologically Marked Aspectual distinctions
a) Progressive

Tha mi ag ithe cèic
Be.PRES I PROG eat.VN cake
"I am eating cake"

VI rule: Event
$\left.\right|_{\text {Interval }} \Leftrightarrow a^{\prime} / a g$
b) Unrestricted Perfect

Tha mi air an cèic $(a)^{1}$ ithe Be.PRES I PERF the cake TRAN eat.vn "I have eaten cake"

VI Rule: Precedence $\quad \Leftrightarrow \quad$ air
c) Restricted Perfect (After-perfect)

Tha mi as dèidh an cèic (a) ithe Be.PRES I REST.PERF the cake TRAN eat.VN "I have just eaten the cake"/ "I'm after eating the cake"

VI rule: Precedence

(will argue for this below)
d) Prospective (topic of today's talk)

Tha mi a'dol a dh'ithe cèic
Be.PRES I PROSP eat.VN cake
"I am going to eat cake"

VI Rule: Precedence

(will argue for this below)
e) Restricted near-prospective

| Tha mi gu | an cèic | (a) ithe |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Be.PRES I | REST.PROSP | the cake | TRAN | eat.VN |

"I'm about to eat the cake"
${ }^{1}$ The $a$ transitive particle is normally omitted in front of vowel initial words, but it present in these same constructions when the verb begins with a consonant.

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5)
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- Going to ignore back-shifting and forward shifting (i.e. whether we need multiple $T$ heads)
- Going to assume that the Tha auxiliary is inserted into T (following Cowper 2010) (going to ignore the question of whether we need multiple V heads (note that multiple V heads are necessary to explain combined aspects.


## 2. The Syntax of $A^{\prime}$ dol $A^{L}$

### 2.1 Head or Phrasal complex?

6) Is $a^{\prime}$ dol $a^{L}$ a complex syntactic object or has it been reanalyzed as a head?

It has the surface form of "PROG go.vN to V " Why not treat this as a biclausal multi head structure like English "going to" constructions?
7) Complement Hypothesis (McCloskey, p.c.)

8) Grammaticalized head hypothesis (Schreiner and Carnie forthcoming)

9) Purpose clause construction (similar in form to the complement hypothesis but with different function) (Heuttner 1989)


Claim \#1: $a^{\prime}$ dol $a^{L}$ has been reanalyzed as an ASP head in Scottish Gaelic but not in Irish. This will allow us to treat it like other aspect particles in the language.
10) McCloskey (p.c.) suggested to us that the $a^{L}$ ( $d h^{\prime}$ ) portion of $a^{\prime} d o l a^{L}$ ( $d h^{\prime}$ ) alone expresses the prospectivity of the construction. This is based on the fact that one can get a prospective reading (and in some cases a purpose clause reading) with a variety of verbs, not just "go" and even when the go verb does not co-occur with an auxiliary. This is true in Ulster Irish:

| a) | Tá mé ag gabhail $\underline{a d h}$ ' ithe greim bidh. be.PRES 1s PROGgo.Vn PRT eat bite food.gen |  |
| :---: | :---: | :---: |
| I'm going to eat a bite of food.' |  | Irish |
| b) | Thosaigh mé a dh'ithe mo dhinnéar. begin.PAST 1s PRT eat.VN my dinner |  |
|  | 'I began eating/to eat my dinner.' | Irish |
| c) | Stad mé a dh'ithe modhinnéar. stop.PAST 1s PRT eat.VN my dinner |  |
|  | 'I stopped eating/to eat my dinner.' | Irish |
| d) | Lean mé orm a dh'ithe modhinnéar. follow.PAST 1s on.1s PRT eat.Vn my dinner |  |
|  | 'I went on to eat my dinner/I went on eating my dinner.' | Irish |
| e) | Shuigh mé a dh'ithe modhinnéar. sit.PAST 1s PRT eat.Vn my dinner |  |
|  | 'I sat down to eat my dinner.' | Irish |

11) In the following textual examples, agentive purpose clause interpretations are simply impossible,

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since there are no agents in these sentences. The interpretation is wholly prospective, despite the lack of a 'go' verb:

| a) | Nuair a thosaigh na daoine a dh'érí when C begin.PAST the people PRT become.Vn n 'When the people began to become more numerous in | líonmhar i Rinn na Feirs numerous in RnF in Rannafast' (NBMO026) | Irish |
| :---: | :---: | :---: | :---: |
| b) | Thoisigh an tráthnónaa dh'érí dorcha. begin.PAST the evening PRT grow dark 'The evening began to grow dark.' (NBMO220) | Irish |  |
| c) | Bhí imnidhe ag toiseacht a theacht air be.PAST worry PROG begin.VN PRT come on.3sm 'He was beginning to get worried.' (OMGS1172) | Irish |  |

So in Irish, prospective meaning is not tied to the "go" verb. Several different matrix verbs allow (and in some cases require) a prospective interpretation. This all suggests that in Ulster Irish, the $a^{L}$ ( $d h^{\prime}$ ) by itself is the prospective aspect marker, and the fact that it is a complement to $\mathrm{ag} \mathrm{dul} / \mathrm{ag} \mathrm{gabhail} / \mathrm{a}^{\prime} \mathrm{dol}$ is a part of a larger pattern of subordination. I claim this is not true for Scottish Gaelic
12) Scottish Gaelic, like Irish, allows purpose clause interpretations of $a^{L}\left(d h^{\prime}\right):$

| A dh'ithe cèic 'se | a bhith | beò. |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| PRT eat.vN cake cOP.3SM | PRT be.VN | alive |  |
| 'To eat cake is to live.' |  |  | purpose clause interpretation |

13) However, the purpose clause interpretation is not available with $a^{\prime}$ dol $a^{L}$ in Glendale Gaelic (cf. MacAulay 1992:186).
a) I'm going to eat some cake.
i) 'I'm traveling there in order to do some cake eating.'
ii) 'There is cake-eating in my future.'
b) Tha $\mathrm{mi} \mathrm{a}^{\prime}$ dol $\mathrm{a}^{\mathrm{L}}$ dh'ithe cèic. be.PRES 1s PROSP eat.VN cake
i) *'I'm travelling in order to do some cake eating.'
ii) 'There is cake-eating in my future.'
14) In order to get the motion + purpose interpretation, a locative must be used:
Tha mi a' dol ann a dh'ithe cèic.
be.PRES 1s PROG go.Vn THERE PRT eat.VN cake
'I'm going there in order to eat cake.' (purpose clause interpretation)
15) When the verb "go" is not in its $a^{\prime}$ dol form, but in a different form (e.g. the preterite), then the purpose clause interpretation becomes the preferred one.

| Chaidh mi | $a^{\text {L }}$ | dh'ithe | cèic |
| :--- | :--- | :--- | :--- |
| go.PAST I | PRT | eat.vN $\quad$ cake. |  |
| 'I went in order to eat cake.' (There must be physical going; i.e. purpose clause) |  |  |  |

16) Gaelic verbs stad 'stop' and suidhe 'sit' behave like past tense 'go' above and have only intent/purpose clause interpretations. This is true whether a periphrastic or a basic construction is used.
a) Stad $\operatorname{sinn}$ a dh'ithe cèic. stop.PAST 1p PRT eat.VN cake 'We stopped in order to eat cake.' / *'We stopped eating cake.' (purpose clause only)
b) Bha sinn a' stad a dh'ithe cèic.
be.PAST 1p PROG stop.Vn PRT eat.Vn cake
'We stopped in order to eat cake.' (purpose clause only)
17) Recall that in Ulster Irish non-agentive predicates like 'begin' and 'start' can be paired with $a^{L}+(d h)$ where they can receive obligatory prospective interpretations (see above). This is impossible in Glendale Gaelic:
a) *Thòisich mi a dhannsadh a-rithist
begin.PAST 1s PRT dance.vn again
Intended: 'I began to dance again.'
b) *Bha sinn a' tòiseachadh a dh'ithe cèic.
be.PAST we PROG start.Vn PRT eat.Vn cake. Intended: 'We were starting to eat the cake.'
c) *Thòisich a' mhuir a dh'fhàs dorcha. begin.PAST the sea PRT grow.Vn dark Intended: 'The sea began to grow dark.'
d) *Thòisich àireamh-shluaigh an Ath-Leitheann a dh'fhàs nas motha. begin.PAST population the Broadford PRT grow COMPR bigger Intended: 'The number of people in Broadford began to grow bigger.'

In Gaelic, unlike Irish, prospective meaning is only allowed with both $a^{\prime}$ dol $a^{L}$ (dh). No other verb is allowed, and no other form of the verb "go" (e.g. the preterite) is allowed. No other constructions allow a prospective interpretation We can therefore hypothesize that the sequence $\mathrm{a}^{\prime}$ dol $\mathrm{a}^{\mathrm{L}}$ (dh) has been grammaticalized into a single Asp head

### 2.3 Prediction: The Constituency of $A^{\prime}$ dol $A^{L}$ (DH)

If [ $a^{\prime}$ dol $\left.a^{L}(d h)\right]$ is a head (as we claim in the Complex Head Hypothesis), it should behave like an aspect head with respect to constituency tests.

### 2.3.1 Clefting

If the particle $a^{L}$ ( $d h^{\prime}$ ) forms a constituent with the VN, then it should be able to be clefted, with that verbal noun, just like other particles. If it forms a constituent with [ $a^{\prime}$ dol] then it should resist clefting.

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18) a) Tha Màiri a'dola bhàthadh! be.PRES Màiri PROSP drown.vn 'Màiri is going to drown!'
b) *'S ann a bhàthadh a tha Màiri a' dol! COP in.3SM PRT drown.vN wh be.pres Màiri PROG go.vn
*'It's to drown that Màiri is going!'

### 2.3.2 AdVERb PLACEMENT

19) If [ $a^{\prime}$ dol $a^{L}$ ] is an aspect head, it should not be possible to insert an adverb between dol and $a^{L}$. If the $a^{L}$ forms a constituent with the verbal noun, on the other hand, then you should be able to put an adverb in this position.
a) Tha $\mathrm{mi} \mathrm{a}^{\prime}$ stad a-rithist $\mathrm{a}^{\mathrm{L}}$ dh'ithe cèic. be.PRES 1s PROG stop.VN again PRT eat cake.
"I am stopping again to eat cake."

be.PRES 1s PROG sit.VN again PRT eat.VN cake
"I am sitting again to eat cake."
c) *?Tha mi a' dol a-rithist $\mathrm{a}^{\mathrm{L}}$ dh'ithe cèic.
be.pres 1s prog go again PRT eat.vn cake.
'I'm going again to eat.' (marginally acceptable with a purpose reading)
d) Tha $\quad \mathrm{mi} \mathrm{a}^{\prime} \mathrm{dol}^{\mathrm{L}}$ dh'ithe cèic a-rithist.
be.PRES 1s PROSP eat.Vn cake again
'I'm going to eat again.'

### 2.3.3 AN ELLIPSIS IN YOUNGER PEOPLE’S SPEECH

20) Mother: Ith do dhinnear!
eat.IMP POSS.2s dinner
'Eat your dinner!'
Child: Tha mi a' dol $\mathrm{ga}^{2}$ !
be.Pres 1s prog go.vn $\underline{a}^{2}$
'I'm going to!'
Again this pattern is unexpected under the complement hypothesis, but is the predicted pattern if [ $a^{\prime}$ $d o l a^{l}$ ] is a single reanalyzed aspect head, as the particle is outside the elided VP.
[a dol $a^{L}(d h)$ ] behaves syntactically and semantically like a single grammaticalized Asp head
[^1]
## 3. What does [ $A^{\prime}$ dol $A^{L}$ ] Mean? What is its featural representation?

Prospective aspect RT $\prec E T$. Prospective aspect can be seen as the "reverse" of perfect aspect (where ET ८RT)

## 3.1 [ $A^{\prime}$ DOL $\left.A^{L}\right]$ MARKS AN ASPECT NOT A TENSE

21) Can appear with any tense auxiliary

| Bha/tha/bithidh | Calum | $a^{\prime}$ dol a ${ }^{\text {L }}$ | phòsadh | Màiri. |
| :--- | :--- | :--- | :--- | :--- |
| be.PAST/be.PRES/be.FUT | Calum | PROSP | marry.VN | Màiri |
| 'Calum was/is/will be going to marry Màiri. ${ }^{3}$ |  |  |  |  |

22) $A^{\prime}$ dol $a^{L}$ does not co-occur with other aspect heads (without a second be verb)

| *Tha | lain air a' dol al | sgrìobhadh. |
| :--- | :--- | :--- |
| be.PRES | lain PERFPROSP | write.vn |
| *'[lain has going to write.]' |  |  |

## $3.2\left[A^{\prime}\right.$ DOL $\left.A^{L}\right]$ SHARES CHARACTERISTICS WITH PERFECTS

The separation of event and reference times, regardless of what order they are in, means that each can be separately referenced (via adverbial modification, etc.).
23) Property of the perfect: can occur with adverbials in two positions distinct interpretations: Clausefinal adverbials allow both event time (ET) and reference time (RT) readings (a), while clause-initial adverbials allow only a reference time reading (b). (Hornstein 1990, McCoard 1978, Comrie 1985, Klein 1992, Michaelis 1994, Reed 2012)
a) Bha Calum air a' bhùth fhàgail aig meadhan-latha.
be.PAST Calum PERF the.SF shop leave.vn at mid-day
'Calum had left the store at noon.' (RT or ET reading-either 'at noon' refers to the time under discussion, and Calum has already left by then, or his leaving was at noon.)
b) Aig meadhan-latha, bha Calum air a' bhùth fhàgail (martha). at mid-day be.PAST Calum PERF the.SF shop leave.vn (already) 'At noon, Calum had left the store (already).' (RT reading)
25) The same phenomena hold for (past) $a^{\prime}$ dol $a^{L}$. With a clause-final adverbial, either reading is available, but the clause initial adverbial is restricted to RT readings

[^2]
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a) Bha Calum $a^{\prime}$ dol $a^{\mathrm{L}}$ phòsadh Màiri aig meadhan-latha. be.PAST Calum PROSP marry.vn Màiri at mid-day
'Calum was going to marry Màiri at noon.' (ET or RT interpretation available-i.e., either the wedding will take place at noon, or we don't know when the wedding will be, but we're reporting about the state of affairs at noon.)
b) Aig meadhan-latha bha Calum $a^{\prime}$ dol $a^{\text {L }}$ phòsadh Màiri, ach at mid-day be.PAST Calum PROSP marry.VN Màiri but
aig uair gabh e an t-eagal.
at hour take.PAST 3sm the fear
'At noon, Calum was going to [i.e. planning to] marry Màiri, but at one he got scared.' (RT interpretation)

### 3.4 The Featural Structure of Prospectivity

26) Prospectives behave like perfects, i.e. they have a precedence relation between RT and ET, but the precedence relation is reversed. I suggest we indicate this with a feature dependent upon precedence called [REVERSED].


- I use this dependent feature rather than proposing a [SUBSEQUENCE] feature, because of the way it can combine with the [RESTRICTED] feature below. If we had a [SUBSEQUENCE] feature, [RESTRICTED] would have to be allowed to be a dependent of both [PRECEDENCE] and [SUBSEQUENCE]. With a [REVERSED] Feature, [RESTRICTED] can always be a dependent of [PRECEDENCE] independent of the direction of the precedence relationship.
- Precedence without the REVERSED feature is interpreted as the ET happening before the discourse anchor as in a perfect (the usual case). Precedence with the [REVERSED] feature has the ET happening after the discourse anchor.


### 3.5 Restricted Prospective: gu

27) One challenge to the claim that $a^{\prime}$ dol $a^{L}$ is a prospective marker is the existence of another prospective aspect marker in the language: gu. Adger (1994) identifies $g u$ as a marker of " $\mathrm{E}>\mathrm{R}$ " (essentially a prospectivity marker).

| Tha | mi gu litir a sgriobhadh. |  |  |
| :--- | :--- | :--- | :--- |
| be.PRES | is GU letter | TRAN | write.vN |
| 'I am about to write a letter.' |  |  |  |

28) However, unlike $a^{\prime}$ dol $a^{L}$, gu places a restriction on how far event time is from reference time:
a) \#Tha lain gu taigh a thogail ann an còig bliadhna. be.PRES lain GU housetRAN build.VN in five year \#'lain is about to build a house five years from now.'
b) Tha e gu ceumnachadh ann am mios. be.PRES 3SM GU pace/graduate.vN in month 'He is about to graduate in a month.'
c) Tha laingu bhith trang a-màireach. be.PRES lain GU be.vn busy tomorrow 'lain is about to be/going to be busy tomorrow.'
29) We can capture the distinction between this form and the unrestricted $a^{\prime}$ dol $a^{L}$ prospective, by making use of the feature [RESTRICTED], which limits the duration between the ET and RT. This feature appears to be dependent upon the [PRECEDENCE] Feature.
30) This feature can appear either with bare [PRECEDENCE], in which case it realizes the restricted perfect (a), or with the [PRECEDENCE --- REVERSED] structure, where it is realized as the restricted prospective marked by gu (b).
a) Restricted Perfect (After-perfect)

Tha mi as dèidh an cèic ithe
Be.pres I rest.perf the cake eat.vn
"I have just eaten the cake"/ "I'm after eating the cake"
Precedence


## 4. Predictions and Problems.

### 4.1 TWO PATHWAYS TO THE FUTURE?

31) For Cowper [PRECEDENCE] has two realizations: It is realized as past tense when anchored to the speech time, and as the past participle when anchored to a different discourse anchor (e.g. RT) - Is the same true for [PRECEDENCE --- REVERSED]? Can it be a pathway to a future tense?

- Cowper and Hall (2010) and Cowper (2003) explicitly exclude a "pure" subsequence model of the future, noting that futures almost always have some kind of modal force to them. They propose that future "tense" is really one possible realization of the modality feature [IRREALIS].

Claim: Gaelic future tense is not linked to [IRREALIS] but it is instead a representation of [PRECEDENCE REVERSED]
32) Note that Gaelic main verbs lack any present tense inflection. Many of the bleached uses of the English present tense (e.g., generic, habitual, etc. See Cowper 1998) are accomplished by the future in Gaelic:

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a) Bithidh Mairi ag òl.
be.fUT Mary PROG drink.vN
'Mary drinks.'
b) Bruidhidh Màiri Gàidhlig gutric
speak.fUT Mary Gaelic frequently
Mary speaks Gaelic frequently
These lack modal force, and are clearly not Irrealis, so the future tense marking must be tied to some other feature than IRREALIS.
33) Of course, in many contexts, the future in Gaelic can have English-like modal interpretations, but maybe this is due to implicature rather than part of the denotation of the future tense itself
34) Another example? South Baffin Inuktitut -Iaaq (Hayashi 2011)
35) Predicts that if a language has prospectives, then it also has a non-modal future (and vice versa?). No idea if this is true or not

### 4.2 Precedence Restricted Tense Systems

Claim: Just as [PRECEDENCE] can extend to both tense and aspect systems, we might predict that [PRECEDENCE --- RESTRICTED] can also be found in tense systems.
36) French recent past Je viens de dire

Amazonian languages Proximate tense.
South Baffin Inuktitut hodiernal uses of the future -niaq. (Hayashi 2011)

## 5. CONCLUSIONS

- $\quad\left[a^{\prime}\right.$ dol $\left.a^{L}(d h)\right]$ has been reanalyzed and grammaticalized as an ASP head.
- Tight connection between "dol" and the particles
- lack of purpose clause readings
- Constituency tests (clefting, adverb placement, ellipsis)
- Proposed that it is the realization of [PRECEDENCE --- REVERSED]
- Proposed that gu (restricted prospective) involves the use of a [RESTRICTED] feature


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[^0]:    * Parts of this presentation are taken from a paper forthcoming in the Journal of Celtic Linguistics, although the analysis is quite different from that work. Thanks to Muriel Fisher, Heidi Harley, Bridget Copley, Richard Compton, Seth Cable, Mary Willie, Claire Bowren, Michael Bauer, Jim McCloskey, an anonymous reviewer from the Journal of Celtic Linguistics and the audience at the Celtic Linguistics Conference in Rennes, Brittany in 2012. This research was supported in part by a grant from the US National Science Foundation \#BCS0639059.

[^1]:    ${ }^{2} G a$ is the inflected form of $a^{L}$ that is expected in this context.

[^2]:    ${ }^{3} \mathrm{~A}$ number of examples in this section are drawn from Reed (Schreiner) (2012).

