

Nominal predication and the semantics of roots*

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1. Introduction

1.1 Overview

In Scottish Gaelic, a construction is found involving the verb *bi* ‘be’, an invariant pronoun, a noun that measures a span of time or space and a ‘from/since’ phrase, as in (1):

- (1) Tha e/*i bliadhna bhon a bha thu an seo.
be.PRS¹ 3SGM/3SGF year(F) from/since COMP be.PST 2SG here
‘It is [has been] a year since you were here.’

This construction is similar to one type of nominal predication in the language, but shows different restrictions: only nouns that indicate spans of time or distance appear in the construction, and the ‘from/since’ phrase is required. Furthermore, the verb *bi* ‘be’ would be unexpected a case of nominal predication without an accompanying inflected preposition. Scottish Gaelic has also been claimed not to have expletive pronouns (McCloskey 1996; cf. Adger 2011).

In this paper I argue the following: the pronoun in this construction is in fact referential, rather than pleonastic, and refers to the span described by the accompanying nominal; the nominal forms a predicate by merging with a null classifier that is only semantically compatible with roots that have an interpretation in the context of [SPAN];

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¹ Data are from my own fieldwork with speakers from the Isle of Skye, unless otherwise indicated. Abbreviations follow Leipzig Glossing Rules (<http://www.eva.mpg.de/lingua/resources/glossing-rules.php>). Additional abbreviations are as follows: AGRO object agreement; VN verbal noun (participial) form.

and these sentences involve a type of nominal predicate not otherwise found in the language. These data have important implications for our understanding of the interaction of root semantics with functional material, and for theories of nominalization and classifier structure in general.

In the rest of this section I provide a brief background on Scottish Gaelic. In section 2 I present and explicate the relevant data. In section 3 I present my analysis. Section 4 is the conclusion.

1.2 Background: Scottish Gaelic

Scottish Gaelic is a Celtic language of the Goidelic branch and, like the other Celtic languages, displays VSO word order. A grammatical point of note given the construction under consideration here is the two major forms of nominal predication in the language. More permanent properties are expressed via a construction with the “copula” *is*, while more temporary properties are expressed using the verb *bi* ‘be’ and an obligatory inflected preposition:

- (2) Is Mairi boireannach.²
COP.PRS Mairi woman
‘Mary is a woman.’
- (3) Tha Mairi *(’na) dotair.
be.PRS Mairi in.3SGF doctor
‘Mary is/works as a doctor.’

I have previously argued (Schreiner 2015) that these types of predication pattern semantically not with the traditional distinction between individual- and stage-level predicates, but with two parts of Roy’s (2006/2013) three-way division of nonverbal predicates. In her system there are *maximal* predicates, which yield *defining* sentences (similar to individual-level predication); *non-dense* predicates, which yield *characterizing* sentences; and *dense* predicates, which yield *situation-descriptive* sentences. I have argued that sentences like (3) above correspond to dense predication, and I argue in this paper that the *tha e* [span] construction corresponds to non-dense predication. I show in section 3 that a prediction of Roy’s account that at first seems to fail is in fact borne out by the Scottish Gaelic data.

² This construction has largely fallen out of use now, and has been replaced by a cleft construction that also employs *is*:

- (i) ’S e Sasannach a th’ ann a Lachy.
COP.PRS 3SGM Englishman COMP be.PRS in Lachy
‘Lachy is an Englishman/English.’ (Schreiner 2015:116)

2. The *tha e* [span] construction

2.1 The basics

The construction under consideration is composed of the tense-inflected verb *bi* ‘be’, the third person singular masculine pronoun *e* (regardless of the gender of the noun), a noun, and a ‘from/since’ phrase, as in (4):

- (4) Tha e/*i seachdainn bhon a thachair e.
 be.PRS 3SGM/3SGF week(F) from/since COMP happen.PST 3SGM
 ‘It is (/has been) a week since it happened.’

The noun must be a span of time (5) or distance (6), and the ‘from/since’ phrase must be present; other kinds of embedded clauses are not permitted (7):

- (5) Tha e cola-deug/mìos/latha *(bhon a bha thu an seo).
 be.PRS 3SGM fortnight/month/day from/since COMP be.PST 2SG here
 ‘It is (/has been) a fortnight/month/day since you were here.’

- (6) Tha e dà mhìle *(bho seo gus an aiseag).
 be.PRS 3SGM two mile from/since here to the ferry
 ‘It is two miles from here to the ferry.’

- (7) Tha e fichead rionnagan a bha mi air a cunntadh a-nis.
 be.PRS 3SGM twenty star.P COMP be.PST 1S PRF AGRO count.VN now
 ‘It is twenty stars that I have counted now.’

As mentioned in the introduction, nominal predicates that express more permanent properties employ the “copula” *is*, while more temporary properties are conveyed using the verb *bi* ‘be’ and an inflected pronoun, as in (8):

- (8) Tha mi *(’nam) thidsear.
 be.PRS 1S in.1SG teacher
 ‘I am [currently/now] a teacher.’ (Adger and Ramchand 2003:332)

The *tha e* [span] construction resembles this latter type of predication in that it employs the verb *bi* (inflected for tense), a pronoun in subject position, and a noun. However, the *tha e* [span] construction does not allow the inflected preposition, and has the other requirements discussed above.

If this were an instance of nominal predication with *bi*, we would expect to see the inflected preposition, but this is ungrammatical, as seen in (9). On the other hand, if this were a case of equation (see e.g. Adger and Ramchand 2003), we would expect *is*, as seen in (10).

- (9) Tha e (*'na) mìle bhon a sheo gu ruige a bhuth.
 be.PRS 3SGM in.3SGM mìle from/since here up to the shop
 'It is a mile from here up to the shop.'
- (10) 'S e Calum an tidsear.
 COP.PRS 3SGM Calum the teacher
 'Calum is the teacher.' (Adger and Ramchand 2003:349)

To summarize, the puzzling things about the *tha e* [span] construction are as follows. First, it involves what seems to be an example of an expletive pronoun, which Scottish Gaelic has been claimed not to have (McCloskey 1996). Second, only a particular kind of noun participates in the construction, and the 'since' or 'from' phrase that must be present seems to be connected to the noun somehow. And third, the construction employs the verb *bi* 'be' in what seems to be a type of nominal predication, where it would normally not be expected.

2.2 Further data

We saw above in (5) and (6) that the noun can describe a span of distance or time. Note that while a distance-related noun is often naturally paired with a 'from' phrase, and a time-related noun with a 'since' clause, other pairings are also possible: the construction can also describe the span of time relevant to a particular distance, as in (11); the distance relevant to a particular happening, as in (12); or even a non-canonical span of distance, given the right context, as in (13):

- (11) Tha e coig mionaidean bhon a sheo gusa rubha.
 be.PRS 3SGM five minute.P from/since here to the point/headland
 'It is five minutes from here to the point.'
- (12) Tha e deich mìle air fhichead bhon a thachair sin.
 be.PRS 3SGM ten mile on twenty from/since COMP happen.PST that
 'It is thirty miles since that happened.'
 Context: The speaker is driving and addressing their passenger, who keeps asking about a noise the car made.
- (13) %Tha e fichead peann bhon a sheo gusa rubha.
 be.PRS 3SGM twenty pen from/since here to the point/headland
 'It is twenty pens from here to the point.'
 Context: The pen has been declared a new unit of measure.

The verb may also appear in past or future tenses:

- (14) Bha e bliadhna bhon a chunnaic mi Bob.
 be.PST 3SGM year from/since COMP see.PST 1SG Bob
 'It was [had been] a year since I saw [had seen] Bob.'

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- (15) Bha e mu mhile bhon a sheo gusa rubha.
be.PST 3SGM about mile from/since here to the point/headland
'It was about a mile from here to the point.'
Context: The tectonic plates have shifted, and the distance between here and the point has changed.
- (16) Bithidh e bliadhna an ath scheachdainn bhon a choinnich
be.PRS 3SGM year the next week from/since COMP meet.PST
mi ri Elvis.
1SG to Elvis
'It will be a year next week since I met Elvis.'

The nominal may include numerals (as seen in 11-13 above), but not a definite article:

- (17) *Bha e a' bhliadhna air fada bhon a thachair e.
be.PST 3SGM the year on long from/since COMP see.PST 3SGM
Intended: 'It's the whole year since that happened.'

A mass noun, even when conceived of as a type of span, is impermissible as the nominal. In (18), a fairy has turned the road to the point into porridge:

- (18) *Bha e brochan bhon a sheo dhan a rubha!
be.PST 3SGM porridge from here to the point
Intended: 'It's porridge from here to the point!'

In the next section I draw on Roy's (2006/2013) three-way division of non-verbal predicates to help explain the distribution of this construction.

3. Demystifying the *tha e* [span] construction

I have shown that the *tha e* [span] construction requires the verb *bi* 'be', an invariant pronoun, a count nominal that can be interpreted as a span, and a 'from/since' phrase that describes that nominal. In this section I lay out an analysis of the construction that draws on Roy's (2006/2013) account of non-verbal predication and provides an answer to each of these points.

3.1 Roy's (2006/2013) account of non-verbal predication

Roy (2006/2013) considers non-verbal predicates in a number of languages (including Irish) and argues for a three-way distinction to replace the traditional division (started by Carlson 1977 and revised by Kratzer 1995) between stage-level and individual-level predicates. Her categories are as follows: *maximal* predicates (e.g., French nouns with the indefinite article) define an individual. These predicates involve a number phrase and a Max operator. *Dense* predicates describe a situation, and like mass nouns, are homogeneous. They involve other functional structure, such as a prepositional phrase. *Non-dense* predicates involve a classifier phrase and yield characterizing sentences. They

are the equivalent of atomic/count nouns in that they are able to be broken down into component parts.

The predictions of Roy's account are largely borne out in Scottish Gaelic. For instance, nominal predicates with *bi* 'be' (as in example 3) in Scottish Gaelic are dense, yielding situation-descriptive sentences, while those with *is* (as in example 2) are maximal, yielding defining sentences (Schreiner 2015). However, Roy's theory incorrectly predicts grammaticality for a sentence with a structure like that in (19):

- (19) **[Tha e [ClassP_[nP dotair.]]]*
 be.PRS 3SGM \emptyset doctor
 Intended: 'He is a doctor.'

While Roy (and others, e.g. Adger & Ramchand 2003) claim that a bare N/*n* is unable to become a predicate on its own, Roy posits that count nouns in classifier structures should be able to form predicates. The sentence in (19) should be grammatical with a characterizing reading given a null classifier head. (Her explanation for the observed ungrammaticality of sentences like that in (19) is that *bi* simply cannot select for any nominal predicates.)

I propose that *bi* can in fact form "characterizing" nominal predicates in the presence of classifier structure in Scottish Gaelic; the caveat is that the only (known) phonologically null classifier head in the language is restricted to certain nominals—namely, those that describe spans. Otherwise, this type of nominal predicate is not found in the language.

3.2 Tying together the parts of *tha e* /span/ construction

To review, there are four parts of the *tha e* /span/ construction to be accounted for: the choice of verb, the invariant pronoun, the limited choice of nominal, and the 'from/since' phrase. First, I claimed above that the verb *bi* (rather than the copula *is*) is present in this construction as part of a "characterizing" type of nominal predication. I have also demonstrated that the nominal involved must be interpretable as a span. I further propose that the invariant pronoun *e* is not expletive but referential, and points to the span described by the nominal. Since the span is not represented overtly (i.e., the sentence is not 'the span from x to y is two miles'), the pronoun referring to it is the default masculine singular.

First consider the 'from/since' phrase. In some cases, the complement of *bho* is a clause, as in (20):

- (20) *Tha e seachdainn bhon a chunnaic mi Calum.*
 be.PRS 3SGM week from/since COMP see.PST 1SG Calum
 'It is (/has been) a week since I saw Calum.'

Here, the sentence seems to mark out the span of time between the event time and the time of speech, with the content of the 'since' clause marking the time of the eventuality (seeing Calum). However, note that the interpretation of the construction when a 'since'

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clause is present is somewhat perfect-like. Putting *bi* in the past with a ‘since’ clause, as we saw in (14) (repeated here as 21), makes it even clearer:

- (21) Bha e bliadhna bhon a chunnaic mi Bob.
 be.PST 3SGM year from/since COMP see.PST 1SG Bob
 ‘It was [had been] a year since I saw [had seen] Bob.’

This sentence would be used in the process of telling a story about a time in the past (the reference/assertion time) and describing a previous seeing event (seeing, at event time). Thus in these cases the ‘since’ clause acts as a kind of perfect-level adverbial. In other cases, there are two prepositional phrases after the nominal, each marking one end of the span of distance characterized by the nominal, as in (6) (repeated here as 22):

- (22) Tha e dà mhile bho seo gus an aiseag.
 be.PRS 3SGM two mile from/since here to the ferry
 ‘It is two miles from here to the ferry.’

To arrive at a *tha e [span]* sentence, we begin with a root that is interpretable as a span (more on this below). The root is merged with a [SPAN] nominalizer (*n*, a light noun à la Kramer’s 2018 analysis of plurality in herd nouns). The resulting *nP* then merges with the *bho* PP(s). This larger *nP* cannot form a predicate on its own (see the argumentation in Roy 2006/2013, Adger and Ramchand 2003, and others that bare nominals cannot form predicates). In Scottish Gaelic, a nominal can merge with a preposition to form a “dense” predicate and then with *bi* to yield a situation-descriptive sentence, or form a maximal predicate and a defining sentence with *is*. Here I am proposing that the *nP* merges with a null classifier. Within a Distributed Morphology (Halle and Marantz 1993) approach, its Vocabulary Insertion rule will need to contain a specification that restricts it to span nominals. The Vocabulary Item competing for insertion into the Class head would be as follows:

- (23) [+span] ↔ ∅ / ___ *nP*[SPAN]

The projected ClassP will then merge with Pred; the subject will start in the specifier of the projected PredP before moving to AgrS.

The requirement that the nominal be interpretable as a span can be formalized by specifying an interpretation in the root of the nominals involved. For instance, the Encyclopedia entry for *bliadhna* ‘year’ would be as follows:

- (24) $\sqrt{418}$ ↔ [+time] & [...] & time(“year”) & span(“year”) / [*n*_[+span][___]√]

This specification makes the root compatible with the nominalizer that is in turn compatible with the classifier head that is needed to form the nominal predicate.

In (25) I give a tree for the *tha e [span]* construction with a ‘since’ clause:

3.3 Discussion

In sum, the *tha e* [span] construction results from a span-interpretable nominal merging first with a PP or PPs, then with a Class head to project a ClassP that forms a non-dense predicate inside PredP. The invariant pronoun subject is referential but appears in default form as it refers to a phonologically unrepresented span (described by the overt nominal).

This analysis provides closure to an open issue with Roy's proposal for Scottish Gaelic, and supports the view that classifiers can interact with nominal semantics. These data may also provide interesting evidence that NumP and ClassP are able to project separately (as in e.g. Roy and Gebhardt 2009, contra Picallo 2006, Alexiadou et al. 2010): Roy (2006/2013) and Schreiner (2015) argue that NumP is not projected in nominal predication with *bi*. Of course, since numerals are able to appear before the noun in this construction, further study is required to confirm the structures involved. The data also support the idea that acategorial roots (e.g. Borer 2005) still have some semantic content.

4. Conclusion

In this paper I have argued that the *tha e* [span] construction in Scottish Gaelic is an example of non-dense nominal predication (in Roy's 2006/2013 terms) concerning a span. The predicate is formed when a root with a possible interpretation as a span merges with a span nominalizer and then with a prepositional phrase that delimits the span. The subject is a default referential pronoun that refers to the span described by the nominal.

A number of open questions remain, including the existence of other Class heads in the language; the structure of spans involving numerals inside the nominal; behavior with other spans (e.g. temperature, volume, etc.); and behavior with potential classifiers like 'dozen'.

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