

# Degrees of Central Coincidence Across Categories\*

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## OVERVIEW

- Scottish Gaelic (SG) has two markers of *central coincidence* between Figure and Ground (after Hale 1986) that exist *outside* the spatial realm: one that marks imperfective aspect and one that creates a particular kind of nominal predicate
  - Imperfective aspect is marked with *a(g)*, historically the preposition 'at' (now *aig*)
  - The nominal predicates in question are marked with *ann*, historically 'in' (now *ann (an)*)

**QUESTION:** Why should the language employ prepositions of central coincidence in these instances?

**QUESTION:** Why is the distribution of prepositions as it is?

**PROPOSAL:**

- Imperfective aspect states that temporal Figure and Ground overlap and is expected to be marked by such a grammatical element (after Demirdache & Uribe-Etxebarria)
- The type of nominal predication under consideration is marked with a similar element due to the nature of the argument-predicate relation (after Talmay and Hale)

**PROPOSAL:** SG employs different prepositions of central coincidence for these meanings because they involve different types of centrality

## THEORETICAL BACKGROUND

### Figure and Ground

- Talmay (1978/2003) defines Figure & Ground and gives defining characterizations for them
  - Figure**—"Has unknown spatial (or temporal) properties to be determined";
  - Ground**—"Acts as a reference entity, having known properties that can characterize the Figure's unknowns" (2003:316)
- Talmay demonstrates different instances of Figure/Ground in sentences—the relationships between two nominals in a single clause, and main and subordinate clauses of multiclausal sentences

### Central Coincidence (Figure in Ground)

- Hale (1986) argues that an important theme in Figure-Ground relations is that of central vs. non-central coincidence
  - Hale's discussion of Warlpiri case shows that distinctions of central coincidence can involve additional dimensions (e.g., the trajectory inherent in *along*)
  - He does not discuss distinctions between different types of central coincidence, as I do here
- Demirdache & Uribe-Etxebarria (1997 and forward; "D&UE") extend this theme to temporal aspects of the grammar
  - Tense, Aspect, Mood, and temporal adverbials are spatiotemporal predicates (WITHIN, BEFORE, AFTER that relate temporal Figure to Ground
- Central coincidence ((WITH)IN) results in present tense (assertion time *in* utterance time) and progressive/imperfective aspect (assertion time *in* event time)
 

[E-V-T]	[A&T-T]
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- D&UE note that languages mark distinctions of central coincidence with prepositions such as *in, at, etc.*

- These are prepositions of containment ('in') or coincidence ('at') (e.g. Kemmerer 2005, Zwarts & Winter 2000, Coventry et al. 1994)
- When lexical items are appropriated to instantiate grammatical functions, the lexical items involved are often "appropriate" in a way that seems to reflect something about the cognitive architecture—e.g., 'go' motion constructions marking future tense (see e.g. Bybee et al. 1994)
- An outstanding question is to what extent the "choice" of lexical item can be seen to reflect details of the grammatical function
- Trying to compare across languages in this case is particularly difficult: the meanings and domains of prepositions rarely overlap exactly between languages
- Interestingly, SG uses (derivatives of) both 'in' and 'at' to instantiate different non-spatial meanings
- This gives us the opportunity to investigate these related prepositional meanings within one language

## DATA

- Scottish Gaelic (SG) employs what are historically prepositions in several non-spatial domains
  - E.g.: Morphologically realized aspects other than the perfective are marked by material that is homophonous (or nearly so) with prepositions (see Ramchand 1993, Reed 2012)
- In each case, I have argued (after D&UE; Reed 2012, Schreiner ms.) that the particle in question spells out the relation between ASSERTION TIME and EVENT TIME (e.g., as *dèidh* 'after' = perfect)
- As D&UE's account predicts, progressive/imperfective aspect is marked with [a particle deriving from] a preposition of central coincidence, *a'* (ag before vowels; from *aig* 'at'):
  - (1a) Tha mi ag ithe.  
be.PRESENT I A' eat.PARTICLE  
'I am eating.'
  - (1b) Tha e a' tuigsinn.  
be.PRESENT he A' understand.PTCP  
'He understands.'
- In its prepositional uses, it indicates coincidence between spatial or temporal Figure and Ground, as English 'at':
  - (2a) Bha mise 'nam stad aig an t-solas.  
be.PAST.1EMPH ANN.AGR stop.PTCP at the light  
'I was stopped at the spotlight.' (Reed 2012:250)
  - (2b) Bha e air fhàgail aig meadhan-latha.  
be.PAST he PERF leave.PTCP at mid-day  
'He had left at noon.'
- SG also employs another preposition of central coincidence for a non-spatial meaning: the particle *ann* (from the preposition *ann (an)* 'in'). Prepositionally, it indicates containment between spatial or temporal Figure and Ground, as English 'in':
  - (3a) Cuir ann an gloinne uisg.' e.  
put in glass water it  
'Put it in a glass of water.'
  - (3b) Tha mi gu mìle a ruith ann an còig mionaidean.  
be.PRES I PROSE mile AGO run.PTCP in five minutes.  
'I'm about to run a mile in five minutes [a 5-minute mile].'

- Outside of these uses, *ann* also appears with stage-level-like nominal predicates:

- (4a) Tha Lachy 'na dhotair.  
be.PRES Lachy ANN.AGR doctor  
'Lachy is [works as] a doctor.'
  - (4b) Tha i 'na boireannach #(a-nisde).  
be.PRES she ANN.AGR woman now  
'She is a woman #(now).' (Schreiner 2015:115)
  - (4c) Tha an tìr 'na fhàsach #(a-nis).  
be.PRES the land ANN.AGR wilderness now  
'The land is a wilderness #(now).' (Schreiner 2015:124; Based on Masson 1882:77)
- (5) Is doctair Calum. (Ramchand 1996:177; my gloss)  
COPULA.PRES Doctor/Calum  
'Lachy is [at his core/definitionally] a doctor.'

- In Schreiner (2015) I argue that in all cases *ann* creates "situation-descriptive", but not "definitional" (Roy's 2006/2013 terms) nominal predicates; these require functional structure unavailable in the nominal domain, and so must merge with prepositional structure

## PROPOSAL

- With prepositions, we know that we need to distinguish between more than just central vs. non-central coincidence between Figure and Ground, even just in the spatial realm
  - E.g., 'at' the store vs. 'in' the store vs. 'on' the store—all centrally coincident relations
- The SG data indicate that we also need to distinguish between (or among) levels or types of central coincidence in other areas
- These distinctions in prepositional meaning are reflected in how they are grammaticalized

**(A):** Why are these non-spatiotemporal relations realized by former prepositions? What (if anything) does the prepositional meaning relate (i.e., what are the Figure and Ground)?

- Progressive Aspect**—D&UE: Aspect is a spatiotemporal relation between the Assertion Time (Figure) and Event Time (Ground)
  - Progressive aspect is the spatiotemporal relation (WITH)IN
- In SG, *a'* heads an Aspect phrase (Ramchand 1993, Reed 2012)

- Nominal Predication**—We can generalize from Talmay's (1978/2003) discussion that in cases of simple predication, the subject is the Figure while the predicate is the Ground

**(B):** Why are two different prepositions employed? What informs the "choice" between 'at' and 'in'?

- Just as the prepositions *aig* and *ann an* convey different kinds of centrally coincident relations between Figure and Ground, so do progressive aspect and predication
- Necessary for the progressive is the overlap of two times
- The type of nominal predication under discussion here ("situation-descriptive") corresponds to the figure being *contained* by the ground—a person is (currently) in the "doctorhood" realm, e.g.

- This is in opposition to "definitional" (following Roy 2006/2013 for Irish) predicates, which are formed with a different 'be' verb and no preposition (see ex. 5)

- Instead of the Figure being *in* the Ground, Figure and Ground are related by anaphora, yielding covolution between the two
- This corresponds to the more fundamental, definitional relationship between subject and predicate in these constructions

- Overall, the system in SG demonstrates an instance in which a language co-opts details of a lexical item, not just its overall meaning, when it borrows it to express a grammatical function

## CONCLUSIONS & IMPLICATIONS

- We have seen an example of a language that has adopted two prepositions of central coincidence for non-spatial purposes
  - While the preposition of coincidence ('at') was co-opted to express aspectual central coincidence, that of containment was borrowed as the functional material required to create some nominal predicates
- Hale's theme of central vs. non-central coincidence between figure and ground is an important one
- However, as we can see from the SG data, a further distinction needs to be made
  - Just as we need to distinguish between different centrally coincident prepositional meanings, we must differentiate between these relations when they are utilized elsewhere in a language in order to account for the data we see
- When investigating languages that employ spatiotemporal notions outside the usual domains, we need to keep an eye out for the same kinds of distinctions we see within the prepositional sphere
- This also has language-specific implications for SG: we should look more closely at constructions with *ann* elsewhere in the language; for instance, clefts with *ann*

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