Copular clauses in Kalaallisut: implications for case[1]

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1 Introduction

- In this talk we examine case marking in Kalaallisut incorporation strctures and argue that it supports Yuan's (2018) distinction between syntactic last resort case and morphological default case.

- The empirical material is from the speech of the second author, Ellen Thrane

- Ellen was born in Upernavik on the northwest coast of Greenland, moved south to Ilulissat and then to Denmark.

- We have been collaborating, mostly via Zoom, since June 2022

2 Language background

- Kalaallisut is a member of the Inuit-Yupik-Unangan language family and the official language of Greenland

- There are around 50,000 speakers in Greenland and upwards of 17,000 speakers living in Denmark

- The language is polysynthetic with noun incorporation and exclusively suffixing[2]

(1) Naja nutaa-mik sikkile-qar-poq.
Naja new-MOD bicycle-have-3SG

'Naja has a new bicycle.'

(2) misigi-nngi-ssa-nngua-qi-nir-aa!
sense-NEG-PROS-little-EMPH-X.wonder-3SG>3SG

'He must've had not the least inkling of it!'

Qillarsuakkunik oqalualaaq (Qillarsuaq's Saga, via Bittner 2007)

[2]Glossing conventions: COP = copula; EMPH = emphatic marker; ERG = ergative; IND = indicative mood; INST = instrumental (aka modalis); NEG = negation; PART = participial mood; PL = plural; PROS = prospective; SG = singular. Absolutive nomimals are glossed without case for reasons that will become clear.

- Case alignment is ergative-absolutive, and agreement targets ERG and ABS arguments.

  (3)   Juuna angerla-jaar-poq.
        Juuna leave-early-3SG
        'Juuna left early.'

  (4)   Naja-p   Juuna ikior-paa.
        Naja-ERG Juuna help-3SG>3SG
        'Naja helped Juuna.'

- Subject and object agreement forms are portmanteaux, (4)

- The unmarked word order is S-O-V, (4), though other orders are possible

- Complement clauses may precede, (5), or follow, (6), the matrix verb

  (5)   [$_{CP}$ Naja   angerla-jaar-toq   ] eqqaama-vara.
              Naja.ABS leave-early-3SG.PART   remember-1SG>3SG
           'I remember that Naja left early.'

  (6)   Eqqaama-vara   [$_{CP}$ Naja   angerla-jaar-toq   ].
           remember-1SG>3SG   Naja.ABS leave-early3SG.PART
           'I remember that Naja left early.'

3   A case contrast

Starting point: Kalaallisut noun incorporation can strand a modifier (e.g Sadock 1980:32)

- In general, that modifier displays instrumental (aka modalis) case.

(7)   a. Naja nutaa-mik   sikkile-qar-poq.
          Naja | new-INST | bicycle-have-3SG.IND
          Naja has a new bicycle.

      b. *Naja sikkile-qar-poq   nutaaq
          Naja bicycle-have-3SG.IND | new |
          Intended: Naja has a new bicycle.

- However, if a nominal incorporates into the copular root -*u*, its modifiers are realized in the bare absolutive form:[3]

(8)   a. Naja meera-a-voq   angisooq
          Naja child-COP-3SG.IND | big |
          Naja is a big child.

      b. *Naja angisuu-mik meera-a-voq.
          Naja | big-INST | child-COP-3SG.IND
          Intended: Naja is a big child.

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[3]The copular root is underlyingly /u/, but assimilates in (8a) & (8b) to a preceeding /a/ by a regular phonological process.


Proposal:

- modifiers are INSTRUMENTAL in non-copular incorporation because the incorporee heads an ARGUMENT.

- modifiers are ABSOLUTIVE in copular incorporation because the incorporee heads a PREDICATE NOMINAL.

- arguments need to be licensed but no case is available for the incorporee in (7a) → modifer of incorporee receives last resort syntactic instrumental case.

- predicate nominals do not need to be licensed → modifer in (8a) surfaces in default absolutive morphological form.

- default case is lack of Vocabulary Insertion

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4 Background

Noun incorporation   a fixed set of verbal roots obligatorily incorporate their direct object (e.g. Sadock 1980)

(9) Naja nutaa-mik ⏐sikkile⏐-qar-poq.
     Naja new-INST bicycle-have-3SG.IND

     Naja has a new bicycle.

(10) Naja ipittu-mik ⏐savis⏐-sior-poq.
      Naja sharp-INST knife-look.for-3SG.IND

      Naja is looking for a sharp knife.

(11) Nillertu-mik ⏐kaffi⏐-sor-usun-neru-vunga.
      cold-INST   coffee-consume-prefer-more-1SG.IND

      I prefer to drink cold coffee.

(12) Proposed structure for non-copular noun incorporation inspired by Johns (2007)
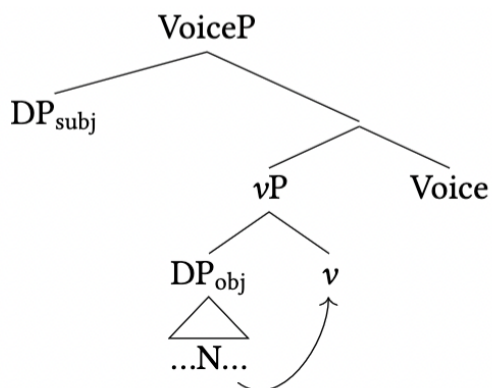
**Last Resort vs. default case**   (Yuan 2018:234-241)

- LAST RESORT SYNTACTIC CASE

    - assigned when an argument fails to be licensed—by Agree or case assignment—in the narrow syntax.
    - assigned by a counter-cyclically Merged P-head at the final stage in the syntactic derivation.
    - in Kalaallisut (and Inuktitut) last resort syntactic case is instrumental

(13)   Syntactically unlicensed nominal (Yuan 2018: 235)
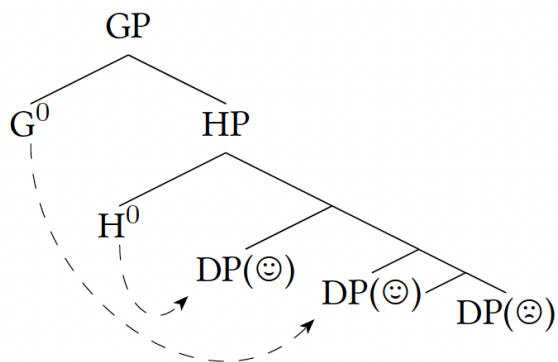
(14)   Post-syntactic last resort instrumental case assignment (Yuan 2018: 235)
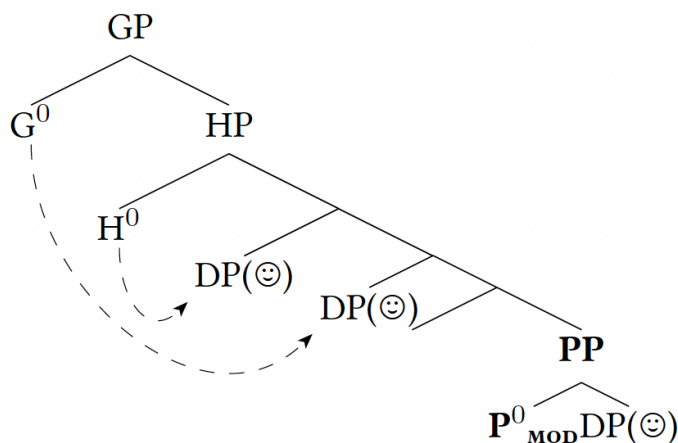
- this structure is instantiated, e.g., in ditransitives with a secondary object, where the secondary object receives last resort instrumental case:

(15)   Naja-p   meeqqa-t sukkulaa-mik/*sukkulaaq tuni-vai.
       Naja-ERG child-PL chocolate-INST/chocolate give-3SG>3PL.

       Naja gave the children chocolate.

- DEFAULT MORPHOLOGICAL CASE

    - realization of "nominals that are outside of the purview of the Case Filter" (Yuan 2018:241)
    - absolutive in Kalaallisut and Inuktitut

– for instance, a noun used in isolation is in the bare absolutive form

(16)   LANGUAGE TEACHER POINTING TO A DOG
qimmeq (dog)

– intransitive subjects and transitive objects are also "outside the purview of the Case Filter" because they are licensed by ϕ-Agree $\Rightarrow$ default absolutive

(17)   PARTIAL DISTRIBUTION OF LAST RESORT AND DEFAULT CASE IN KALAALLISUT

	LAST RESORT INSTRUMENTAL	DEFAULT ABSOLUTIVE
intransitive subject	*	$\checkmark$
transitive object	*	$\checkmark$
predicate nominals	*	$\checkmark$
in isolation	*	$\checkmark$
secondary object	$\checkmark$	*
demoted object of causative	$\checkmark$	*
non-copular incorporee	$\checkmark$	*

5   Analysis of case contrast

5.1   Analytic assumptions

(18)   LICENSING: Only arguments need syntactic licensing in the form of syntactic case or ϕ-Agree (e.g. Yuan 2018, Schütze 2001),
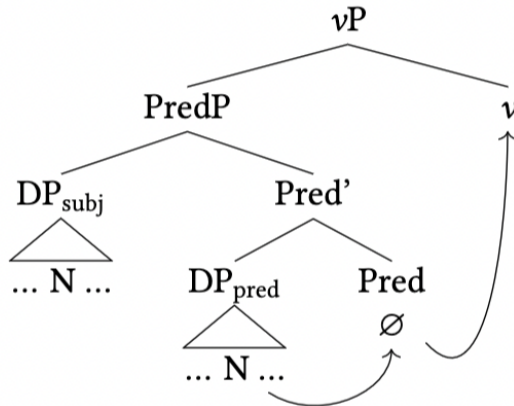
(19)   ARGUMENTHOOD

- an ARGUMENT is Merged as a complement or specifier of a head along the clausal spine (V, v, Appl, Voice,...)
- a NON-VERBAL PREDICATE is Merged as the complement of a Pred head (Bowers 1993)

(20)   SELECTION: a copula selects for a PredP (Citko 2011).
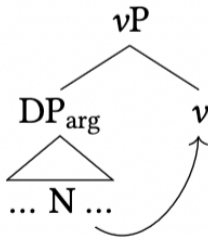
(21)   NON-COPULAR INCORPORATION
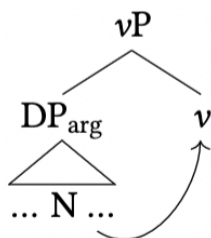
(22)   COPULAR INCORPORATION

5.2   Instrumental case in non-copular incorporation

Recall:

(23)   Naja nutaa-mik   sikkile-qar-poq.
       Naja [new-INST] bicycle-have-3SG.IND

       Naja has a new bicycle.

(24)

- *sikkili nutaa-* (bicycle new) originates as the DP sister of v *-qar*.

- it is therefore an argument and needs to be licensed.

- in principle it could be licensed by the object ϕ-probe in the C domain (Compton 2017, Yuan 2018), but to be accessible to the ϕ-probe on C an internal object needs to move to the edge of the Voice phase head (Phase Impenetrability Condition)

- in the general case the internal argument moves to specifier of VoiceP where it is accessible for ϕ-Agree from C, but head movement of *sikkili* to v bleeds ϕ-Agree (Takano 2000)

(25)   OBJECT MOVEMENT BLED BY INCORPORATION
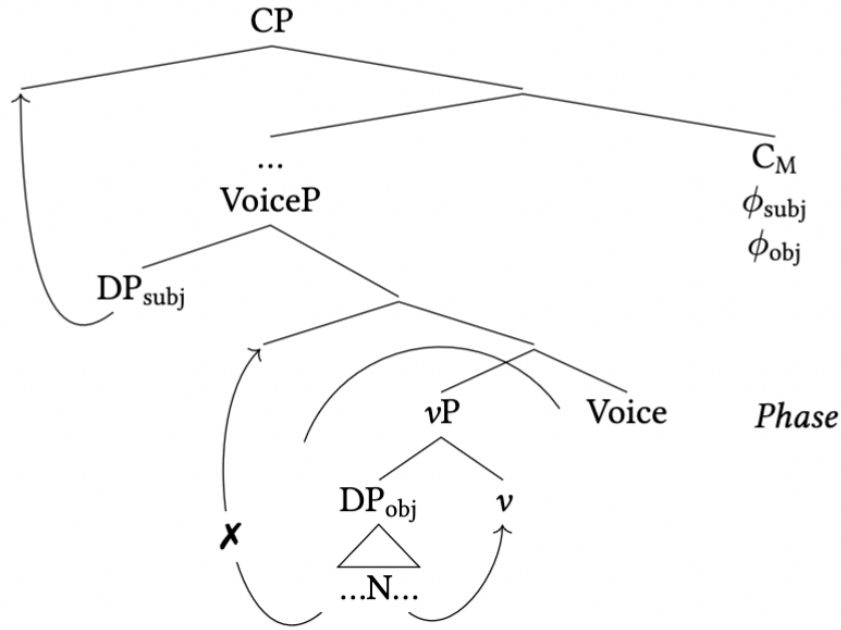
- therefore the INCORPOREE IS NOT LICENSED BY AGREE

- by assumption *-qar* is not a case-assigner and there are no functional heads that could assign oblique case ⇒ the INCORPOREE IS NOT LICENCSED BY CASE

- the incorporation configuration therefore TRIGGERS LAST RESORT SYNTACTIC INSTRUMENTAL CASE.

5.3   Case in copular incorporation

Recall:

(26)   Naja meera-a-voq   angisooq.
       Naja child-COP-3SG.IND $\boxed{\text{big}}$

       Naja is a big child.

(27)   COPULAR INCORPORATION
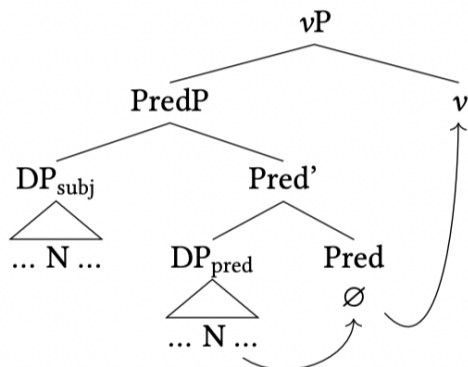
- the key difference between the regular incorporation structures and copular incorporation is that the internal DP is a predicate nominal and not an argument.

- this means that it does not need licensing and is therefore outside the purview of the Case Filter.

- therefore no Last Resort syntactic case assignment is triggered.

- instead the stranded modifier surfaces in the unmarked absolutive form *angisooq*.

5.4   Word order

Recall:

- absolutive modifiers obligatorily follow the verb (28a-b)

(28)   a. Naja meera-a-voq   angisooq.
           Naja child-COP-3SG.IND $\boxed{\text{big}}$

           Naja is a big child.

       b. *Naja angisooq meera-a-voq.
            Naja $\boxed{\text{big}}$ child-COP-3SG.IND

           Intended: Naja is a big child.

PROPOSAL:

- postverbal order is derived by obligatory extraposition of the modifier

- this extraposition can be seen as a grammaticalized disambiguation strategy to make it clear that an absolutive modifers modifies the incorporee and not the absolutive subject (Kleinschmidt 1851, Sadock 1980, Bok-Bennema and Groos 1991)

(29)   STRUCTURAL AMBIGUITY WITH PREVERBAL MODIFIER:

       [[subj mod] V] vs. [subj [mod V]]

(30)   NO STRUCTURAL AMBIGUITY WITH POSTVERBAL MODIFER: [sub [V mod]]

- three observations could support an extraposition analysis, if further substantiated.

- the second and third rely on the observation that extraposition creates a separate prosodic unit (Aissen 1992, Büring 2013, Royer 2021)

Observation 1   Extraposition is either impossible or optional in incorporation structures with instrumental modifiers.

- if extraposition is a grammaticalized disambiguation strategy, we do not expect it to occur—or at least not to be obligatory—in structures where case itself disambiguates.

Observation 2   impressionistically the post-verbal modifier is prosodically off-set from the verb, suggesting the it forms an independent phonological unit in the extraposed position.[4]

- If the post-verbal position of the modifier is due to extraposition and extraposition creates an independent prosodic unit, observation 1 follows.

Observation 3   in general, complement clause may preceed or follow the embedding verb, but if an embedded incorporation structure contains a post-verbal modifier, it cannot preceede the embedding verb.

(31)   Eqqaama-vara   [Naja   meera-a-soq   angisooq].
       remember-1SG>3SG.IND   Naja.ABS child-COP-3SG.PART big.ABS

       I remember that Naja was a big child.

(32)   *[Naja   meera-a-soq   angisooq] eqqaama-vara.
        Naja.ABS child-COP-3SG.PART big.ABS   remember-1SG>3SG.IND

       I remember that Naja was a big child.

- If a preverbal complement clause must form a prosodic phrase with the embedding verb (as suggested by the prose in Fortescue 1984:34) and extraposition of the modifier creates an independent prosodic unit, observation 2 follows.

summary   In copular incorporation

- a modifier of an incorporee surfaces in the bare form, because

  a) there are no structural case assigners that could assign a syntactic case to it and

  b) predicate nominals are not subject to the Case Filter and hence last resort syntactic instrumental case is not triggered.

- modifiers of the incorporee follow the verb because they obligatorily extrapose to avoid a structural ambiguity

6   Predictions

The account pursued here makes two correct predictions:

1. complements to copular incorporees

- since a morphological default cannot override a syntactic case, stranded complements to copular incorporees should surface in whatever oblique case they ordinarily have (e.g. allative) and not in the bare (aka absolutive) form

- this is borne our for the complement of the copular incorporee *ila* 'member' in (33):

(33)   Naalakkersuisu-nut/*naalakkersuisut ila-a-voq   *naalakkersuisut.
       parliament-ALL/parliament   member-COP-3SG.IND parliament

       She is a member of the parliament.

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[4]This needs to be made more precise by employing the prosodic hierarchy proposed in Arnhold (2014:221-250), which in turn builds on Rischel (1974), especially pp. 185-188.

2. Particle copular clauses

- since predicate nominals are not subject to licensing, other types of copular clauses should also feature a bare (aka absolutive) predicate nominal.

- This is borne out by copular clauses formed with the particle *tassa*:

(34) Pisortaq tassa Hansi/*Hansi-mik.
      boss   COP Hansi/Hans-INST

      The boss is Hansi.

7   Implications for case

- I have proposed that so-called absolutive DPs are actually caseless: no syntactic case is assigned to them and no morphological case is supplied by Vocabulary Insertion

- a common view: such DPs receives default morphological case through Vobabulary Insertion for an underspecified case feature [CASE] (Legate 2008; Schütze 2001)

- present proposal: default case is lack of Vocabulary Insertion

  - No [ABS] feature
  - No [CASE] feature
  - no absolutive null morph
  - *qimmeq* = 'dog' not 'dog-Ø'

- this default-as-absence-of-case analysis straightforwardly **explains why absolutive is null** in Kalaallisut; this must be stipulated on the underspecification approach.

8   Final thoughts

previous accounts

- I know of only one explicit account of the ABS≈INST case alternation in copular and non-copular incorporation, namely that of Bok-Bennema and Groos (1988) (see also Bok-Bennema 1991:167ff, 218ff)

- essential to their account are two dedicated rules:

  1. a non-copular incorporating affix assigns structural instrumental case to a stranded modifier
  2. a stranded modifiers in a copular incorporation structure agrees with the subject for Case

- in contrast, the present proposal attempts to derive the contrast from two general principles:

  1. only arguments need to be licensed
  2. DP arguments that are not licensed by the end of the syntactic derivation are assigned Last Resort syntactic Case, which is instrumental in the Inuit languages (Yuan 2018)

Noun incorporation

- I have assumed a traditional syntactic head-movement analysis of noun incorporation

- recent work on incorporation in Inuit has moved away from this analysis in favor of prosodic word formation (Compton and Pittman (2010) or other post-syntactic mechanisms (Yuan 2024).

- as it stands, the present analysis of the case contrast cannot be integrated with these, since it relies of head movement bleeding phrasal movement and therefore requires head movement to be in the syntax

- a natural next step is to explore an alternative analysis of the case contrast that *is* compatible with these analyses of noun incorporation, specifically independent factors that might keep incorporated objects and predicate nominals from moving out of the vP.

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