Mikkelsen, Line & Schmidt, Grethe & Thrane, Ellen. 2026. Cross-clausal movement and its limits. *Glossa: a journal of general linguistics* 11(1). pp. 1–45. DOI: https://doi.org/10.16995/glossa.23990

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Cross-clausal movement and its limits

Line Mikkelsen, UC Berkeley, mikkelsen@berkeley.edu

Grethe Schmidt, Umiaq, grethes242@gmail.com

Ellen Thrane, Umiaq, aelthrane@gmail.com

Constraints on movement are of central concern to syntactic theory. Recent work has focused on the relationship between the height of the landing site and locality restrictions. Keine (2020) argues that the higher the landing site the fewer locality restrictions are imposed on the movement ("higher is freer"). In contrast Deal (2017) argues that a lower landing site can lead to movement being less restricted due to Delayed Opacity, i.e. "lower is freer". In this paper we argue that, in Kalaallisut (Inuit, Greenland), it is not the height of the landing site that determines whether movement across a finite clause boundary is possible, rather it is the nature of the features driving the movement. In particular, hyperraising is driven by a composite ϕ+D probe, which means that the embedded CP does not act as an intervener for Agree with a goal inside the embedded clause (Halpert 2019). In focus fronting, on the other hand, the embedded CP *does* intervene for Agree with a focused element inside the embedded clause, which accounts for the clause-bounded nature of focus fronting. In addition to deriving the differing locality profiles of hyperraising and focus fronting, the analysis of focus fronting generalizes to *wh*-movement and also accounts for apparent long-distance A-bar movement. The final segment of the paper lays out a broader cross-linguistic typology of locality profiles for A and A-bar movement and suggests that it arises from variation in probe specifications and in the featural content of C.

1 Introduction

Many languages show patterns of DISPLACEMENT in which a syntactic element appears in one position but is connected to another position as well. In (1), *who* appears in clause-initial position, but is also related to the post-verbal object position of *visit*.

(1) **Who** should we visit ___?

A massive body of work has argued that such displacement patterns involve MOVEMENT. A particular movement can be characterized by three specifications:

(1) what element moves?
(2) where does it move to (landing site)?
(3) what material can it cross on its way to its landing site (locality)?

In (1), a *wh*-phrase moves to clause-initial position (specifier of CP) crossing a finite TP boundary [$_{TP}$ *we visit* ___]. Much work has argued that these specifications are not independent of each other:[1]

- connecting (1) to (2):
  STRUCTURE PRESERVATION: phrases move to specifier positions and heads move to head positions (e.g. Emonds 1970).
- connecting (1) to (3):
  HEAD MOVEMENT CONSTRAINT: movement of heads is subject to a more stringent locality condition than movement of phrases (e.g. Travis 1984).
- connecting (2) to (3):
  HEIGHT LOCALITY CONNECTION: movement to a low landing site is subject to more stringent locality restrictions than movement to a high landing site (e.g. Keine 2020).

The existence and nature of such connections are of central concern to syntactic theory, since they have the potential to reveal the mechanism of movement and the principles that constrain it. Here we will be concerned with the connection between (2) and (3), specifically asking the following question: considering movement across a finite clause boundary to different landing sites, does the height of the landing site correlate with whether this movement is possible or not? This is by no means a new question. A celebrated answer from English is based on the contrast between (2) and (3):

[1] All of these are areas of active research and disagreements. For instance, Matushansky (2006) and dos Santos (2025) argue for head movement to a specifier position and Harizanov & Gribanova (2019) argue that syntactic head movement can cross head positions in violation of the Head Movement Constraint.

(2) [$_{CP}$ **Who** do you think [$_{CP}$ __ will visit my mother]]? *WH*-movement

(3) *[$_{TP}$ **Delia** seems [$_{CP}$ __ will visit my mother]] RAISING

In this pair of movement structures, the height of the landing site correlates with the possibility of crossing a finite clause boundary. *Wh*-movement in (2) targets a high position, namely the specifier of CP, and can cross a finite clause boundary. Raising in (3) targets a lower position, namely specifier of TP, and cannot cross a finite clause boundary. Keine (2020) generalizes this into a universal Height-Locality Connection: the higher the landing site of the movement, the less restricted the movement is in the boundaries it can cross. (See also Williams 2003; Abels 2012; Müller 2014; Wurmbrand 2015.) Against this back-drop, we argue that Kalaallisut (Inuit, Greenland) shows the opposite pattern of the English pattern in (2) and (3): movement that targets a low position can cross a finite clause-boundary (hyperraising to object), but movement that targets a high position cannot cross a finite clause boundary (focus fronting and *wh*-movement). This state of affairs is shown in **Tables 1** and **2**.

landing site	**cross-clausal**
high	✓
low	✗

Table 1: Expected: high less restricted than low (English).

landing site	**cross-clausal**
high	✗
low	✓

Table 2: Unexpected: low less restricted than high (Kalaallisut).

The Kalaallisut pattern suggests that height-locality connections are not unidirectional once we look cross-linguistically and therefore cast doubt on Keine's Height-Locality Connection as a universal. Instead of the height of the landing site determining whether cross-clausal movement is possible, we will argue that it is the nature of the movement, specifically which feature triggers it, that explains the Kalaallisut pattern. The analysis has two components: i) INTERVENTION (Rizzi 1990; Abels 2003; Halpert & Zeijlstra 2024 a.m.o) and ii) COMPOSITE PROBING (e.g. Van Urk 2015; Lohninger et al. 2022; Scott 2025). This combination is prefigured in Halpert (2019) and Halpert & Zeijlstra (2024) for hyperraising. The present paper extends their analysis in two ways. First, it contrasts intervention in A-bar movement (focus fronting) with lack of intervention in A-movement (hyperraising). Second, it demonstrates that defective intervention—probe features

count as interveners, even though they cannot satisfy the probe—can lead to clause-boundedness of movement.

The paper is organized as follows. In section 2, we provide background on Kalaallisut and our research collaboration. In section 3, we establish the locality profiles of hyperraising and focus fronting. The analysis is developed in section 4, and section 5 confirms two predictions it makes. Section 6 considers three alternative analyses: i) Delayed Opacity (Deal 2017), ii) Horizons (Keine 2020) and iii) phase unlocking (Lee & Yip 2024). These approaches are contrasted with the intervention analysis in terms of the predictions they make for *wh*-movement, the extent to which they are motivated on language internal grounds, and their theoretical commitments. Section 7 lays out the broader cross-linguistic landscape of height-locality connections and discusses the factors that govern this cross-linguistic variation. Finally, section 8 presents our conclusions.

2 Background

This work represents a collaboration between first author linguist, Line Mikkelsen, second author Kalaallisut speaker, Grethe Schmidt, and third author Kalaallisut speaker, Ellen Thrane. The collaboration between Line Mikkelsen and Ellen Thrane began in the summer of 2022. Ellen Thrane was born in Upernavik in north west Greenland. Her mother and grandmother spoke only Kalaallisut, whereas her father spoke Kalaallisut and Danish. She acquired Kalaallisut from birth and only started learning Danish in school. She moved south to Ilulissat at age 9 and to Denmark after 7th grade for educational opportunities. She volunteers as a Kalaallisut-Danish-Kalaallisut interpreter for Danish public agencies and is affiliated with Umiaq, a Greenlandic association hosted at Kalaallit Illuutaat ('The Greenlanders' house') in Odense, Denmark. Grethe Schmidt joined the project in May of 2024. Grethe Schmidt was born in Attu in north west Greenland and spoke Kalaallisut at home and in school. She lived in a number of other places in Greenland before moving to Denmark in 1980. She is a Kalaallisut-Danish-Kalaallisut translator for two Danish TV-channels and also affiliated with Umiaq at Kalaallit Illuutaat. The data discussed below come from one-on-one weekly Zoom elicitation sessions, which also included discussion of linguistic questions of interest. All elicitation recordings are archived in the California Language Archive.

2.1 Language ecology

Kalaallisut is a member of the Inuit-Yupik-Unangan language family, which is spoken from Eastern Russia across Alaska and Canada to Greenland. It is the sole official language of Greenland, with around 50,000 speakers in Greenland and another 17,000 in Denmark (Naja Blytmann Trondhjem p.c.). The language is acquired by children in the home and taught in school. Danmark

was a colonial power in Greenland and Danish language still has a big presence, especially in administration. English has a growing presence.

2.2 Basic linguistic features

Kalaallisut exhibits classic properties of polysynthethesis: grammatically free argument drop, noun incorporation, high morpheme-to-word ratio, and flexible word order (though see Fortescue 1993). Verbs agree with subject and object and case alignment is ergative-absolutive. These properties are illustrated in (4) through (7).[2]

(4) *pro* **Kaagi**-sor-uit *pro* *pro* ajori-ssu-akkit.
2SG.ABS cake-consume-2SG.CON 1SG.ERG 2SG.ABS angry-FUT-1SG > 2SG.IND
If you eat cake, I'll be angry with you. Ellen Thrane ANM-1

(5) Naja-**p** Juuna ikior-**paa**.
Naja-ERG Juuna.ABS help-3SG > 3SG.IND
Naja helped Juuna. Ellen Thrane AFX-1

(6) Juuna angerla-jaar-**poq**.
Juuna.ABS come.home-early-3SG.IND
Juuna came home early. Ellen Thrane AFX-2

(7) a. Uirnar-luinna-lir-aanga-mi
sleepy-absolutely-begin-HAB-4.SG.CAU
When he got so sleepy he absolutely had to sleep,
b. aputi-qa-nngin-nir-sa-mut nalla-annar-tar-puq
snow-have-NEG-NOMZ-bit-SG.DAT lie.down-just-HAB-3SG.PART
he would just lie down on a bit of snow-free [land]
c. sini-laar-nia-ssa-gami.
asleep-a.little-try-FUT-4SG.CAU
in order [lit. wanting] to try to get a little sleep.
Qillarsuakkunik oqalualaaq (Qillarsuaq's Saga), Passage 2, §12, (2)

In (4) the object *kaagi* is incorporated (Sadock 1980) and all arguments are pro-dropped (Yuan 2018: 154). (4) further shows that both intransitive and transitive agreement morphology is fused with mood morphology: dependent conditional mood in the embedded clause and independent

[2] Each example is annotated with the name of the speaker and an alpha-numerical code identifying it in the first author's notebooks. Textual examples come from Maria Bittner's text collection (https://sites.google.com/view/maria-bittner/kalaallisut). These are annotated with the name of the text and the position of the relevant example within that text. Their glossing has been adjusted to the conventions listed below the conclusion.

indicative mood in the matrix clause. Kalaallisut has eight moods, five of which will be relevant in what follows: causative, contemporative, indicative, interrogative and participial. Example (5) illustrates the unmarked SOV order. SOV order is accepted in any context in elicitation, it is the order volunteered in out-of-the blue contexts, and it is the dominant word order in texts (Fortescue 1993). (See also Fortescue 1984: 93ff, and Kleinschmidt 1851/1968: 98–101 for arguments that SOV is the unmarked order.) Together with (6), (5) shows that case alignment is ergative-absolutive. The transitive subject is overtly marked with the ergative suffix *-p*, whereas transitive objects and intransitive subjects are morphologically unmarked, as is typologically common for absolutive case. There is no morphological ergative/absolutive case distinction in pronouns and plural nouns, but we gloss them with case based on their grammatical function. Finally, the textual example in (7) illustrates high morpheme-to-word ration for both verbs and nouns.

Complement clauses typically appear after the matrix verb and for the bulk of embedding predicates trigger 3SG object agreement on the matrix verb (Fortescue 1984: 34). Three moods are possible for complement clauses: participial mood, causative mood and contemporative mood. The participial and causative moods are used when the embedded subject is distinct from the matrix subject, as in (8) and (9). Contemporative mood (10) is used when the embedded subject is co-referential with the matrix subject. We focus on participial clauses in what follows.[3]

(8) Nalu-nngi-**lara** ajugaa-sutit.
not.know-NEG-1SG > 3SG.IND win-2SG.PART
I know that you won. PARTICIPIAL MOOD – Grethe Schmidt CPL-GS-4

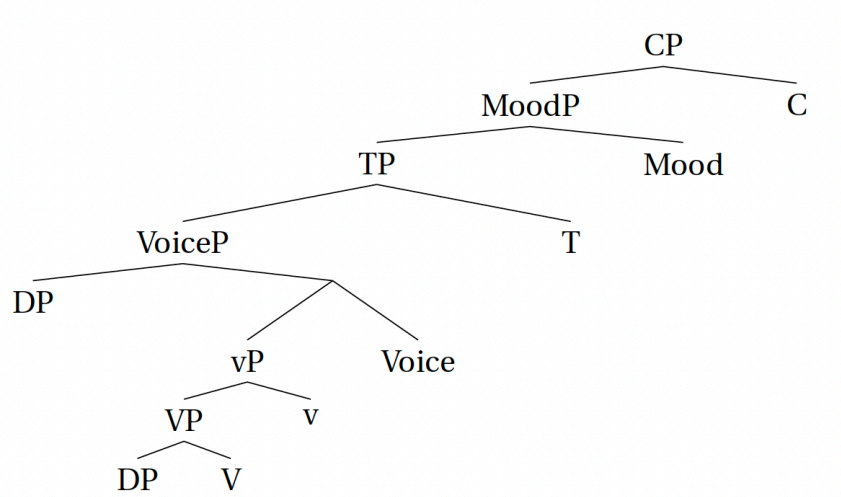
(9) Nalu-nngi-**lara** ajugaa-gavit.
not.know-NEG-1SG > 3SG.IND win-2SG.CAU
I know that you won. CAUSATIVE MOOD – Grethe Schmidt CPK-GS-1

(10) Nalu-nngi-**lara** ajugaa-llunga.
not.know-NEG-1SG > 3SG.IND win-1SG.CONT
I know that I won. CONTEMPORATIVE MOOD – Grethe Schmidt CPL-GS-5

Based on the discussion above, we propose the basic clause structure in (11),

[3] There are a dozen or so embedding verbs that do not show object agreement with the embedded clause, whether it is in the participial, causative or contemporative mood. While we cannot offer a firm explanation of this fact, we adopt a reviewer's suggestion that these embedded clauses are adjoined high in the clause, above both the regular object ϕ-probe and the hyperraising ϕ-probe. They therefore also do not allow hyperraising and we will set them aside.

(11) KALAALLISUT BASIC CLAUSE STRUCTURE



Compton (2018) collapses Mood and C, whereas Yuan (2018: 32) assumes that MoodP is dominated by subject and object agreement projections. As far as we can tell, nothing of consequence hinges on this choice. The points we make could be made under either of the alternative structures.

3 Two movement processes in Kalaallisut

Against the backdrop of Kalaallisut's underlying SOV order, we now consider two movement processes, hyperraising to object and focus fronting. What is of primary interest is that these movements show different locality profiles. Specifically, hyperraising can cross a finite clause boundary and focus movement cannot. In the following examples, hyperraising is indicated by boxing of relevant glosses and focus fronted phrases are bolded.

3.1 Hyperraising

As noted in Fortescue (1984: 38) and Sadock (2003: 32), and discussed at length in Mikkelsen & Thrane (2024), Kalaallisut allows raising to object out of a finite clause, i.e. hyperraising to object:[4]

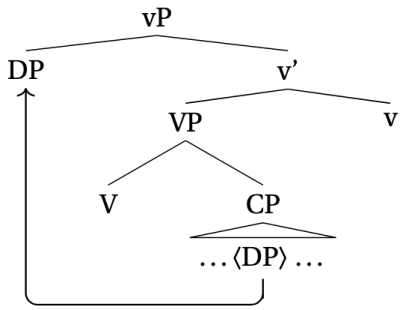
(12) Eqqaama-vara [illit angerla-jaar-tutit.]
remember-1SG>3SG.IND 2SG.ABS come.home-early-2SG.PART
I remember that you came home early. BASELINE – Grethe Schmidt CCB-GS-5

[4] Other languages that have been argued to have hyperraising to object include Janitzio P'urhépecha, (Zyman 2017), Japanese (Tanaka 2002), Kipsigis (Jake & Odden 1979), Korean (Yoon 2007), Mongolian (Fong 2018), Nez Perce (Deal 2017, covertly), Romanian (Alboiu & Hill 2016), Spanish (Herbeck 2020), and Zulu (Halpert & Zeller 2015).

(13) Illit eqqaama-vakkit [__ angerla-jaar-tutit].
2SG.ABS remember-1SG>2SG.IND leave-early-2SG.PART
I remember that you came home early. HYPERRAISING – Ellen Thrane ACU-7

Mikkelsen & Thrane (2024) show that the configuration in (13) involves movement of *illit* from the lower clause into the matrix clause where it triggers object agreement on the matrix verb. They provide evidence from island and locality effects that this is movement, though we won't repeat their data. Of interest here is that this is movement across a finite clause boundary to a low position:

(14) HYPERRAISING OUT OF A FINITE CP



The finiteness of the embedded clause is evidenced by its obligatory mood-agreement morphology—compare (15) to (16)—and its ability to express tense independently of the tense of the matrix clause (17):

(15) *Illit eqqaama-vakkit [__ angerla-jaar].
2SG.ABS remember-1SG>2SG.IND come.home-early
I remember that you came home early. Ellen Thrane BZS-3

(16) Illit eqqaama-vakkit [__ angerla-jaar-**tutit**].
2SG.ABS remember-1SG>2SG.IND leave-early-2SG.PART
I remember that you came home early. Ellen Thrane ACU-7

(17) Illit ilimaga-akkit [__ ajugaa-**ssa**-sutit].
2SG.ABS expect-1SG>2SG.IND win-FUT-2SG.PART
I expect that you will win. Grethe Schmidt BZZ-GS-4

These embedded clauses are therefore at least MoodPs. We will go one step further and assume that they are CPs, based on the fact that *wh*-movement can take place within such embedded clauses, suggesting the presence of a specifier of CP position (Keine 2020: 57).

(18) Nalu-ara [kina$_i$ Naja-p __$_i$ ikior-aa.
not.know-1SG > 3SG who.ABS Naja-ERG help-3SG > 3SG.PART
I don't know who Naja helped. Ellen Thrane CVK-1

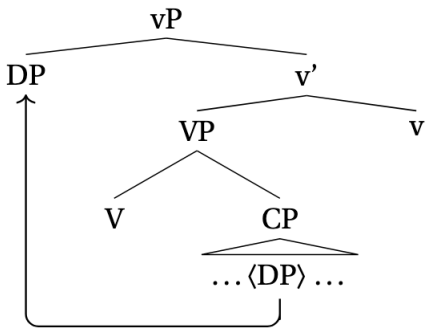
The correlation of finiteness with the presence of a CP is in accord with most analyses of hyperraising (e.g. Martins & Nunes 2009; Deal 2017; Fong 2018; Halpert 2019), though Jenks (2025) argues that Moro hyperraising is out of a finite TP. The exact landing site of hyperraising is a little harder to pinpoint, but crucially it is lower than the landing site of focus movement. This is demonstrated in the examples in (19) and (20).[5]

(19) **Uanga = ana** meeqqa-t eqqaama-gikka angerla-jaar-tut.
1SG.ERG = FOC child-PL.ABS remember-1SG > 3PL.PART come.home-early-3PL.PART
It is me that remembers that the children came home early.
Grethe Schmidt BZO-GS-1

(20) *Meeqqa-t **uanga = ana** eqqaama-gikka angerla-jaar-tut.
child-PL.ABS 1SG.ERG = FOC remember-1SG > 3PL.PART come.home-early-3PL.PART
It is me that remembers that the children came home early.
Grethe Schmidt BZO-GS-2

In the well-formed (19) the hyperraised object *meeqqat* occurs to the right, i.e. lower than the focus fronted DP. The ill-formedness of (20) shows that hyperraising cannot target a position above a focus fronted phrase. For concreteness we take the landing site of hyperraising to be the specifier of vP, as in (21), though all that matters for assessing the Height-Locality Connection is that it is below the landing site of focus fronting (= specifier of CP).

(21) HYPERRAISING TO SPEC-VP



[5] The underlying form of the focus particle is =*una*, but by a general phonological process, /u/ assimilates to a preceeding /a/ resulting in the form =*ana* in these examples.

We have now established the locality profile of Kalaallisut hyperraising, namely that it can cross a finite clause boundary. This is surprising from the perspective of the Height Locality Connection, according to which movement to a low position is more restricted than movement to a high position. This contrast is schematized in **Table 3**.

	landing site	**cross clausal**
Expected	low	✗
Kalaallisut	low	✓

Table 3: Expected locality profile vs. Kalaallisut locality profile.

3.2 Focus fronting

Kalaallisut has a focus construction in which the focused element appears in initial position followed by a clitic (=*una* for singular foci, =*uku* for plural foci) and the verb is realized in the participial mood:[6,7]

(22) **Illin=una** Kaali pulaar-it.
2SG.ERG=FOC Kaali.ABS visit-2SG>3SG.PART
It was you that visited Kaali. Ellen Thrane CCY-7

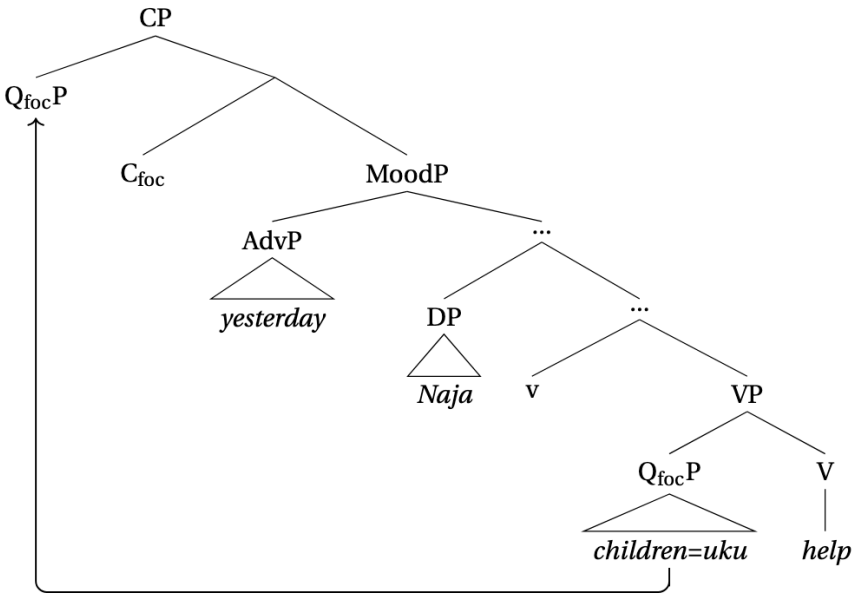
(23) **Meeqqa-n=uku** ippassaq Naja-p ikior-ai.
child-PL.ABS=FOC.PL yesterday Naja-ERG help-3SG>3PL.PART
It was the children that Naja helped yesterday. Ellen Thrane AOX-2

This construction has been noted and described in previous literature (Fortescue 1984: 74ff, 184ff; Molich 2022: 100–107), but, as far as we know, no theoretically oriented analysis has been developed. To begin to fill this gap we start by establishing five analytic properties of the construction. First, though homophonous with the absolutive forms of the singular and plural cataphoric demonstrative pronouns, =*una* and =*uku* are dedicated focus clitics in (22) and (23). Second, focus fronting is derived by movement. Third, focus fronting is clause bounded. Fourth, =*una*/=*uku* are focus Q-particles in the sense of Cable (2010), notated Q_{foc}. Q_{foc} takes the focused phrase as their complement and projects a $Q_{foc}P$. Finally, there is a dedicated focus C head that attracts $Q_{foc}P$ to its specifier. The resulting derivation for (23) is sketched in (24).

[6] =*una* and =*uku* trigger nasalization or lenition of a preceding consonant.

[7] To refer to the information structural status of a phrase we use 'focus' or 'focused'. We gloss =*una* FOC and =*uku* FOC.PL. The morpho-syntactic feature corresponding to focus is notated FOC and used in probe specifications and Vocabulary Items. Finally, we use subscripted 'foc' to designate a subcategory. So C_{foc} stands for a focus C head.

(24) FOCUS FRONTING



The following sections establish each of these properties in turn.

3.2.1 *=una* and *=uku* are focus clitics

As noted above the clitics *=una* and *=uku* that are used in focus fronting constructions are homophonous with the absolutive forms of the cataphoric demonstratives series, given in **Table 4**.[8]

	SINGULAR	PLURAL
ABSOLUTIVE	una	uku
ERGATIVE	uu-ma(p)	uku-a
ALLATIVE	uu-munnga	uku-nunnga
LOCATIVE	uu-mani	uku-nani
ABLATIVE	uu-mannga	uku-nannga
INSTRUMENTAL	uu-minnga	uku-ninnga
PROLATIVE	uu-muuna	uku-nuuna
EQUATIVE	uu-matut	uku-natut

Table 4: Kalaallisut cataphoric demonstrative pronouns.

[8] In the plural paradigm, the inflectional stem is the absolutive form *uku*. In the singular, there is a special inflectional stem *uu-*.

These demonstratives have both pronominal and adnominal uses, which raises the possibility that *=una* and *=uku* are adnominal demonstratives in focus fronting constructions like (22) and (23). There are at least six reasons to resist this conclusion. First, demonstratives can occur before the head noun (25), whereas the clitics found in focus constructions must occur after the focused element (compare (26) to (23)).[9]

(25) [Uku meeqqa-t] ippassaq Naja-p ikior-**pai**.
DEM.PL.ABS child-PL.ABS yesterday Naja-ERG help-3SG>3PL.IND
Naja helped those children yesterday. Ellen Thrane COD-2

(26) *[Uku meeqqa-t] ippassaq Naja-p ikior-**ai**.
FOC.PL child-PL.ABS yesterday Naja-ERG help-3SG>3PL.PART
Intended: It was the children Naja helped yesterday. Ellen Thrane COD-1

Note that mood differentiates the two examples. The indicative mood in (25) tells us that this sentence is not a focus construction, and thus that *uku* is a demonstrative and not a focus particle. The participial mood in (26) reveals this to be a focus construction, where *uku* functions as a focus clitic.

Second, true demonstratives inflect for case as seen in **Table 4**. In contrast only the absolutive forms *=una* and *=uku* are found in the focus fronting construction. Thus when the ergative subject is fronted in (22), the clitic takes the base form *=una* and not the ergative form *=uuma(p)*.

Third, demonstrative pronouns can occur in clauses of any mood, e.g. indicative (27), whereas the focus clitics must occur in participial clauses ((22) vs. (28)).

(27) Uu-map ikior-paanga.
DEM-ERG help-3SG>1SG.IND
That one helped me. Ellen Thrane CNJ-2

(28) *Illin=una Kaali pulaar-pat.
2SG.ERG=FOC Kaali.ABS visit-2SG>3SG.IND
It was you that visited Kaali. Grethe Schmidt COC-GS-1

Fourth, noun phrases formed with demonstratives can occur in non-initial position (29), whereas phrases hosting a focus clitic cannot occur in non-initial position (30).

(29) Meeqqa-t [una angut] ikior-paat.
child-PL.ERG DEM.ABS man.ABS help-3PL>3SG.IND
The children helped that man. Grethe Schmidt CNU-GS-2

[9] The second and third author prefer demonstratives in prenominal as opposed to postnominal position. Fortescue (184:110) lists both orders.

(30) *Ippassaq Naja-p [meeqqa-n=uku] ikior-ai.
yesterday Naja-ERG child-PL.ABS=FOC.PL help-3SG>3PL.PART
Intended: It was the children Naja helped yesterday. Grethe Schmidt CEG-GS-4

Fifth, demonstratives are restricted to 3rd person ((31) vs. (25)), whereas *=una* and *=uku* can attach to local person pronouns (22).

(31) *Una illit angerla-jaar-putit.
DEM.ABS 2SG come.home-early-2SG
Intended: You (there) came home early. Grethe Schmidt BJR-GS-6

Finally, clitic *=una/=uku* can attach to a demonstrative (32) which is consistent with these being focus markers, but surprising if they themselves are demonstrative pronouns.

(32) Uu-mam=una ikior-aanga.
DEM-ERG=FOC help-3SG>1SG.PART
It was that one that helped me. Grethe Schmidt CNS-GS-3

These differences are summarized in **Table 5**.

	DEMONSTRATIVE	FOCUS CLITIC
can precede head noun/host	✓	✗
inflects for case	✓	✗
unrestricted mood	✓	✗
non-initial position	✓	✗
restricted to 3rd person	✓	✗
can co-occur with demonstrative	✗	✓

Table 5: Demonstratives vs. focus clitics.

On this basis we conclude that *=una* in (22) and *=uku* in (23) are not demonstratives, but dedicated focus clitics.

3.2.2 Focus fronting is movement

Evidence that focus fronting is movement comes from reconstruction and island effects.

3.2.2.1 Reconstruction effects

If focus fronting is a species of A-bar movement, we expect it to exhibit reconstruction effects. That is, the moved element should give rise to syntactic and/or semantic effects associated with its base position. We illustrate with anaphor binding in (33)–(35). Kalaallisut possessive inflection

distinguishes anaphoric third person possessors (glossed 4th person) from non-anaphoric 3rd person possessors (glossed 3rd person). Anaphoric possessors must be bound by a structurally higher subject, as seen in the contrast between (33) and (34). In the grammatical (33), the 4th person anaphoric possessor is inside the object and bound by the subject. In the ungrammatical (34), the 4th person anaphoric possessor is *inside* the subject and therefore not bound by a subject.[10]

(33) Hansi$_i$-p [*pro*$_i$ qimmi-ni] maqaasi-vaa.
Hansi-ERG 4SG.ERG dog-4SG > 3SG.ABS miss-3SG > 3SG.IND
Hans$_i$ missed his$_i$ dog. Ellen Thrane AQF-1

(34) *[*pro*$_i$ qimmi-mi] Hansi$_i$ maqaasi-vaa.
4SG.ERG dog-4SG > 3SG.ERG Hansi.ABS miss-3SG > 3SG.IND
His$_i$ dog missed Hansi$_i$. Grethe Schmidt BNZ-GS-3

Now we observe that a possessive object DP with a 4th person possessor can be focus fronted and still be bound by the structurally lower subject (35):

(35) [*pro*$_i$ qimmi-ni] = una Hansi-p __ maqaasi-gaa.
4SG.ERG dog-4SG > 3SG.ABS = FOC Hansi-ERG miss-3SG > 3SG.PART
It is his$_i$ dog that Hansi$_i$ missed. Ellen Thrane AQF-3

If focus fronting is movement, we can understand the grammaticality of (35) as reconstruction: for the purposes of anaphor binding, the possessive object DP (*pro qimmi-ni = una*) behaves as if it is in its base position below the subject (*Hansi-p*).

3.2.2.2 Island effects

Since focus fronting is clause bounded, clause-sized islands like adjunct clauses, *wh*-complement clauses and sentential subjects are irrelevant. Instead we test for movement using the Coordinate Structure Constraint (36) and the Left Branch Condition (37). As (36) shows, a focus marked DP cannot be extracted from a coordinate structure. This holds whether there is narrow focus on the extracted conjunct or on the entire coordination. Similarly (37) shows that a focus marked possessor cannot be extracted from a possessive DP. Again, this holds whether the focus is narrowly on the possessor or on the entire possessive DP.[11]

[10] 4SG > 3SG.ABS means an absolutive possessive DP with a 4SG possessor and a 3SG possessum. Possessors show ergative case marking when case is visible.

[11] For reasons we don't currently understand, ungrammaticality judgments are very robust for extraction across an argument, but somewhat mixed for extraction across an adverb. The same is true for other types of extraction, specifically hyperraising, wh-movement, and scrambling.

(36) *__Illin = una__$_i$ ippassaq [__$_i$ uanga = lu] angerla-jaar-tugut.
2SG.ABS = FOC yesterday 1SG.ABS = AND come.home-early-1PL.PART
Intended: It was you and me that came home early yesterday. Ellen Thrane AQD-3

(37) *__Meeqqa-n = una__$_i$ Naja-p [__$_i$ qimmi-at] nani-gaa.
child-ERG.PL = FOC Naja-ERG dog-3PL > 3SG.ABS find-3SG > 3SG.PART
Intended: It was the children's dog Naja found. Grethe Schmidt CGG-GS-4

This concludes the argument that focus fronting is derived by movement. Next we turn to the locality constraints on this movement.

3.2.3 Locality of focus fronting

Focus fronting cannot cross a finite clause boundary.[12] This restriction is illustrated for intransitive embedding verbs like *sinnattor-* 'dream' and *oqar-* 'say' in (38) and (39).

(38) *__Meeqqa-n = uku__ sinnattor-tunga [Naja-p __ ikior-ai].
child-PL.ABS = FOC.PL dream-1SG.PART Naja-ERG help-3SG > 3PL.PART
Intended: It's the children that I dreamt Naja helped. Ellen Thrane CAU-4

(39) *__Meeqqa-n = uku__ Naja oqar-toq [__ iipili-t tillik-kaat].
child-PL.ERG = FOC.PL Naja.ABS say-3SG.PART apple-PL.ABS steal-3PL > 3PL.PART
Intended: It is the children Naja said stole the apples. Grethe Schmidt CDR-GS-2

This locality restriction also holds for transitive embedding verbs like *ilimagi-* 'expect' and *qulari-* 'doubt' in (40) and (41):

(40) *__Meeqqa-n = uku__ ilimagi-giga [illit __ ikior-itit].
child-PL.ABS = FOC.PL expect-1SG > 3SG.PART 2SG.ERG help-2SG > 3PL.PART
Intended: It is the children that I expect you to help. Ellen Thrane CCL-1

(41) *__Meeqqa-n = uku__ qulari-giga [__ iipili-t tillik-kaat].
child-PL.ERG = FOC.PL doubt-1SG > 3SG.PART apple-PL.ABS steal-3PL > 3PL.PART
Intended: It is the children that I doubt stole the apples. Grethe Schmidt CDQ-GS-2

In all of these examples the focus fronted phrase originates inside the embedded clause and surfaces in the main clause. As these examples show such structures are ungrammatical, demonstrating that focus fronting is clause bound.

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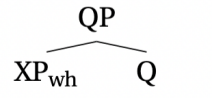
[12] This generalization is robust for transitive verbs. For the intransitive embedding verb *isuma-lior-* 'think'; lit. 'thought-make-', the second author sometimes deems cross-clausal movement acceptable. In contrast, cross-clausal focus movement across other intransitive embedding verbs including *oqar-* 'say', *sinnattor-* 'dream', *tusar-* 'hear' and *allap-* 'write' are judged ungrammatical. At present we have no explanation for the exceptional behavior of *isuma-lior-* 'think; lit. throught-make-' in the second author's grammar.

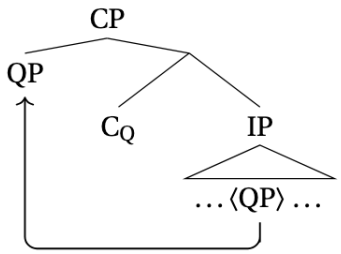
3.2.4 *=una/=uku* are focus Q-particles

Cable (2010) argues that so-called Q-particles serve a mediating role in *wh*-questions. The Q-particle takes the *wh*-phrase as its complement (42) and the interrogative C, C_Q, attracts the entire QP to its specifier, giving the appearance of movement of the wh-phrase (43).

(42) QP SHELL AROUND WH-PHRASE

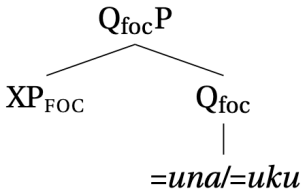


(43) QP MOVEMENT

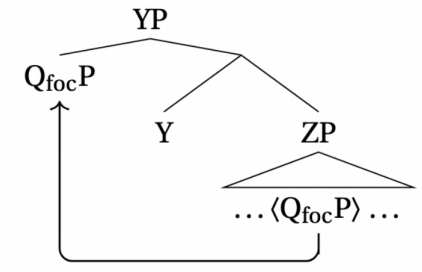


Following a suggestion in Cable (2010: 200–205), we extend this general line of analysis to Kalaallisut focus fronting. Specifically, we propose that *=una* and *=uku* are Q-particles of the focus kind (Q_{foc}) that take the focused phrase as its complement (44). It is then the Q_{foc}P that moves, giving the appearance of focus fronting (45).

(44) FOCUSED XP INSIDE Q_{foc}P SHELL



(45) Q_{foc}P MOVEMENT



Importantly for the analysis of focus fronting developed below, the XP sister of Q_{foc} in (44) can be instantiated by phrases of any type capable of being focused. This is shown for a DP in (46), a CP in (47), an adjectival predicate in (48) and (49), a numeral in (50) and adverbials in (51) and (52).

(46) **Meeqqa-n = uku** uanga ikior-ikka.
child-PL.ABS = FOC.PL 1SG.ERG help-1SG > 3PL.PART
It was the children I helped.' Ellen Thrane AMD-4

(47) **Angerla-jaar-tutin = una** uanga eqqaama-giga.
come.home-early-2SG.PART = FOC 1SG.ERG remember-1SG > 3SG.PART
It was that you came home early that I remember. Grethe Schmidt CEH-GS-5

(48) **Ilumoor-tu-ming = una** Naja politikeri-sior-toq.
speak.truth-PART-INST = FOC Naja.ABS politician-seek-3SG.PART
It is an honest politician that Naja is looking for. Ellen Thrane CEE-3

(49) **Aappalut-tu-ming = una** illor-a qalipak-kiga.
red-IP.3SG-INST = FOC house-1SG > 3SG.ABS paint-1SG > 3SG.PART
It was with red that I painted my house. Grethe Schmidt CEI-GS-3

(50) **Qulining = uku** pani-ga ukio-qar-toq.
ten = FOC.PL daughter-1SG > 3SG.ABS year-have-3SG.PART
It is 10 that my daughter is. Ellen Thrane CEF-2

(51) **Ippassar = una** meeqqa-t Naja ikior-aat.
yesterday = FOC child-PL.ERG Naja.ABS help-3PL > 3SG.PART
It was yesterday that the children helped Naja. Ellen Thrane AOV-1

(52) "**Soor = una** taama = ilior-tutit kuukkuuriaq" aapakaaq aperi-poq.
why = FOC thus = do-2SG.PART crocodile.ABS monkey.ABS ask-3SG.IND
"Why is it that you're doing this, Crocodile?" asked the monkey.
Aapakaaq kuukkuuriarlu "The monkey and the crocodile" §5 (1)

Finally we turn to the landing site of focus fronting, i.e. the identity of Y in the tree in (45).

3.2.5 Establishing the landing site

An important property of the focus fronting construction is that the focused constituent *must* be initial.

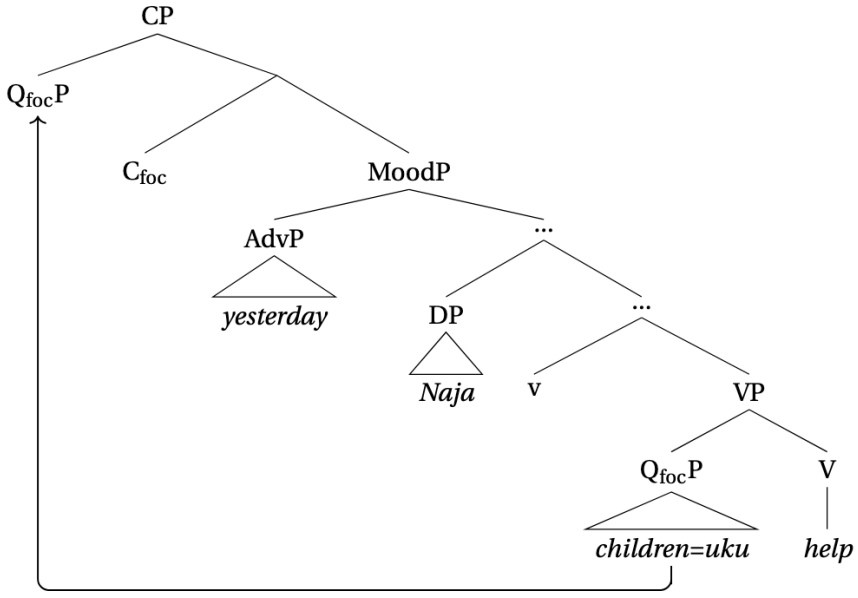
(53) **Meeqqa-n = uku** ippassaq Naja-p ikior-ai.
child-PL.ABS = FOC.PL yesterday Naja-ERG help-3SG > 3PL.PART
It was the children Naja helped yesterday. Grethe Schmidt CEG-GS-2

(54) *Ippassaq **meeqqa-n = uku** Naja-p ikior-ai.
yesterday child-PL.ABS = FOC.PL Naja-ERG help-3SG > 3PL.PART
Intended: It was the children Naja helped yesterday. Grethe Schmidt CEG-GS-3

(55) *Ippassaq Naja-p **meeqqa-n = uku** ikior-ai.
yesterday Naja-ERG child-PL.ABS = FOC.PL help-3SG > 3PL.PART
Intended: It was the children Naja helped yesterday. Grethe Schmidt CEG-GS-4

In the grammatical (53), the focused object, *meeqqan-*, has moved moved across the subject *Naja-p* and across the adverb *ippassaq*, placing it in initial position. Moving it to a lower position, as in (54), or not at all (55) leads to ungrammaticality. We therefore analyze focus fronting as obligatory movement to specifier of CP as illustrated in (56). (The mechanics of this movement are layed out in section 4.2.)

(56) FOCUS FRONTING IS MOVEMENT OF $Q_{foc}P$ TO SPECIFIER OF CP



The landing site of focus movement is thus higher than the landing site of hyperraising, which is the specifier of v, and yet only the latter can cross a finite clause boundary. This is unexpected in light of the Height Locality Connection as evident from the contrast between **Table 6** and **Table 7**.

landing site	cross-clausal
high	✓
low	✗

Table 6: Expected correlation of height and locality.

landing site	cross-clausal
high	✗ (focus movement)
low	✓ (hyperraising)

Table 7: Correlation of height and locality in Kalaallisut.

Having established the locality profiles of hyperraising and focus fronting, we now turn to developing an analysis that accounts for this difference.[13]

4 An intervention analysis

The fundamental idea behind intervention, or relativized minimality, is that syntactic operations are not restricted by absolute locality constraint, such as the Phase Impenetrability Condition, but instead by what material intervenes between landing and launch site for movement (Rizzi 1990; Abels 2003; 2012 a.m.o). In current terms this translates into the configuration of possible goals for Agree (e.g. Halpert 2019 and Halpert & Zeijlstra 2024). Specifically, a closer goal may act as an intervener for a more distant goal, preventing Agree with the latter. In the INTERACTION-SATISFACTION framework for Agree (Deal 2015), this is implemented in terms of satisfaction: if the closer goal satisfies the probe, the probe halts before it gets to interact with the lower goal. The account of clause-bounded focus fronting developed below relies on both this type of regular intervention and on DEFECTIVE INTERVENTION: even when the intervening goal doesn't satisfy the probe it may still causes it to halt by bearing matching *probe* features (Karimi 2013). If the intervening goal is a CP, the operation will be clause bounded. If an embedded CP is not an intervener, including not a defective intervener, cross-clausal movement is possible. We will first account for the lack of intervention in Kalaallisut hyperraising and then develop an analysis of intervention in focus fronting.

4.1 No intervention in hyperraising

As noted above intervention arises when a closer goal satisfies the probe, causing it to halt without interacting with a more distant goal bearing the probed-for feature(s). In Halpert's (2019) of hyperraising in Zulu, there is no intervention in hyperraising to subject configurations

[13] We thank a reviewer for suggesting this line of analysis.

because the hyperraising probe is only satisfied by a goal that has ϕ-features *and* the ability to discharge the EPP on T. While Zulu finite CPs have ϕ-features, they cannot serve as subject. Therefore the embedded finite CP in the hyperraising configuration does not meet the combined requirement of the hyperraising probe, lacking the ability to satisfy the EPP. The hyperraising probe is therefore able to probe past the finite CP and interact with and attract the highest DP goal inside the embedded CP. This derives hyperraising. Because English CPs *can* satisfy the EPP, the embedded CP intervenes between the raising probe and the highest DP inside the embedded CP. This explains the lack of hyperraising in English. Halpert's account of Zulu hyperraising to subject carries over to Kalaallisut hyperraising to object, though we replace the EPP feature on the probe with a D feature. (This avoids positing an EPP feature and instead takes advantage of preexisting category features.) Thus the Kalaallisut hyperraising probe has the specification in (57), using the plus sign for composite, specifically conjunctive, specification of the satisfaction condition.[14]).

(57) KALAALLISUT HYPERRAISING PROBE
[INT:ϕ, SAT:$\phi + \mathrm{D}^{M}$]

To assess intervention we need to determine the featural content of the potential goals for the probe, i.e. the embedded clause and the highest nominal inside of it. Specifically, we need to determine whether these phrases bear ϕ and/or D features. We will assume, uncontroversially, that the presence of ϕ-features is reflected in the ability to control ϕ-agreement, while the presence of a D feature is reflected in the ability to bear case. It is immediately clear that Kalaallisut nominal phrases bear both ϕ and D. As seen in (58), both subjects and objects control agreement on the verb and they also bear case. This is morphologically visible on the ergative subject, but not on the absolutive object because absolutive case is null. There are however further, oblique, cases that we can look to, including the allative goal in (59).

(58) Naja-p Juuna ikior-paa.
Naja-ERG Juuna.ABS help-3SG>3SG.IND
Naja helped Juuna. Ellen Thrane AFX-1

(59) Juuna-mut allap-punga.
Juuna-ALL write-1SG.IND
I wrote to Juuna. Grethe Schmidt CQB-GS-3

Turning to clausal complements, they control 3SG object agreement on the matrix verb, as seen in (60), indicating that finite clauses bear ϕ-features.[15]

[14] There is a rich literature on composite probing including Van Urk (2015), Scott (2025), and Lohninger et al. (2022).

[15] An alternative analysis of (58) is that the 3SG object agreement is default agreement. The language lacks default object agreement elsewhere, so this would have to be a special and limited instance of default object agreement. We will not

(60) Eqqaama-vara [illit angerla-jaar-tutit.]
remember-1SG > 3SG.IND 2SG.ABS come.home-early-2SG.PART
I remember that you came home early. BASELINE – Grethe Schmidt CCB-GS-5

Importantly, clausal complements are unable to bear case, indicating that they are not nominalized by a D-shell.[16] This is not immediately discernable because clausal complements typically occur in an absolutive argument position (complement of transitive V) and absolutive case is null. Therefore baseline examples like (60) are compatible with complement clauses bearing absolutive case. There are however two pieces of evidence that clausal complements do not bear case in Kalaallisut. First, they do not participate in the kinds of case alternations that DP complements do. This is illustrated for anti-passivization in (61)–(64).

(61) Juuna-p angut eqqaama-vaa.
Juuna-ERG man.ABS remember-3SG > 3SG.IND
Juuna remembers the man. Grethe Schmidt CRF-1

(62) Juuna anguti-mik eqqaama-nnip-poq.
Juuna.ABS man-INST remember-AP-3SG.IND
Juuna remembers a man. Grethe Schmidt CRF-2

(63) Juuna-p eqqaama-vaa Naja angerla-jaar-toq.
Juuna-ERG remember-3SG > 3SG.IND Naja.ABS come.home-early-3SG.PART
Juuna remembers that Naja came home early. Grethe Schmidt CRG-1

(64) *Juuna eqqaama-nnip-poq Naja angerla-jaar-tu-mik.
Juuna.ABS remember-AP-3SG.IND Naja.ABS come.home-early-3SG.PART-INST
Intended: Juuna remembers that Naja came home early. Grethe Schmidt CRG-2

(61) and (63) are baseline transitive examples, with an ergative-absolutive case frame and transitive agreement. (62) is the antipassive form of (61): the case frame is absolutive-instrumental and the verb shows intransitive agreement. Now consider (64). Again the verb is antipassive, carries intransitive agreement and its complement is marked with instrumental case. The only difference between this ungrammatical construction and the grammatical example in (62) is that

attempt to make a definitive argument for complement clauses controlling object agreement, since it is not crucial for our analysis of hyperraising. What is crucial is the lack of D features on the clausal complement. If embedded clauses lack ϕ-features as well, they are not even able to interact with the probe, let alone satisfy it. This correctly predicts no intervention, i.e. that hyperraising is possible.

[16] This is especially important to establish for participial clausal complements, as some bonafide nominalizations involve the participial mood. We thank a reviewer for noting this.

(62) involves instrumental case marking of a DP, whereas (64) involves instrumental case marking of a clausal complement. This contrast follows straightforwardly on the assumption that clausal complements are not DPs.

A second observation that supports clausal complements lacking case and therefore lacking a D feature comes from a general ban on having two absolutive DPs within a single finite clause (Compton 2018: 164). This is manifested in the ungrammaticality of (65), where the two internal arguments of a ditransitive are both absolutive. One must be oblique, as seen in (66) and (67).

(65) *Meeqqa-t poortukka-t nassip-pakka/nassi-up-pakka.
child-PL.ABS package.PL.ABS send-1SG>3PL.IND/send-APPL-1SG>3PL.IND
Intended: I sent the children the packages. Grethe Schmidt CQC-GS-3

(66) Meeqqa-nut poortugaq nassi-up-pakka.
child-PL.ALL package.ABS send-APPL-1SG>3PL.IND
I sent the package to the children. Ellen Thrane CIM-2

(67) Meeqqa-t poortukka-nik nassip-pakka.
child-PL.ABS package-INST send-1SG>3PL.IND
I sent the children the package. Ellen Thrane CIM-1

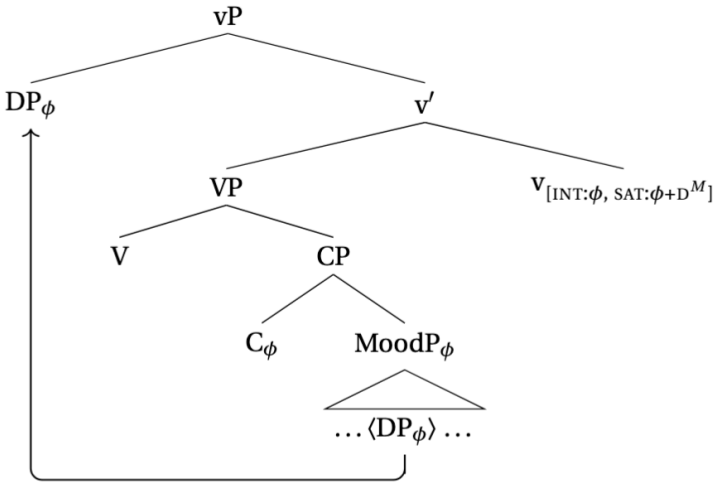
If clausal complements bear (null) absolutive case we expect it to be ungrammatical to have a second absolutive DP in the clause. We can test this with ditransitive embedding verbs like *aperi-* 'ask'. This verb takes an external DP argument (the person asking), a finite complement clause (what is asked) and a DP indirect object (the person being asked). As (68) shows the indirect object surfaces in the null absolutive case controlling object agreement on the matrix verb.

(68) Meeqqa-t aperi-vakka Juuna-p *pro* ikior-ner-ai.
child-3PL.ABS ask-1SG>3PL.IND Juuna-ERG 3PL.ABS help-if-3SG>3PL.PART
I asked the children if Juuna helped them. Ellen Thrane CES-1

If the complement clause also bears absolutive, this would be an exception to the ban on multiple absolutive DPs in a single finite clause. However, if clausal complements do not bear case, (68) is consistent with the ban on multiple absolutives. We conclude that clausal complements do not bear case and that they lack a D feature.

With this much in place we turn to the derivation of hyperraising. The relevant structure is given in (69).

(69) NO INTERVENTION IN HYPERRAISING



When v Merges with VP, the hyperraising probe on v probes for ϕ. The first ϕ-goal is the embedded CP. The CP, however, does not satisfy the probe on account of missing a D feature. The hyperraising probe thus probes past the CP node and interacts with the highest DP inside the embedded clause. By virtue of bearing both ϕ and D, the embedded DP satisfies the probe and moves to the specifier of the matrix vP. Being satisfied, the probe halts. We have now derived the existence of hyperraising to object in Kalaallisut. Next we need to explain why cross-clausal focus fronting is impossible in Kalaallisut.

4.2 Intervention in focus fronting

Before we analyze the lack of cross-clausal focus fronting, we revisit our informal movement analysis of intraclausal focus fronting from section 3.2. There are two parts to the analysis: a focused element embedded in a Q_{foc} shell and a dedicated C head, C_{foc}. Together these force movement of the $Q_{foc}P$ to the specifier of C_{foc}, resulting in its observed clause-initial position. Within the interaction-satisfaction framework, this comes down to the probe in (70).

(70) KALAALLISUT FOCUS PROBE

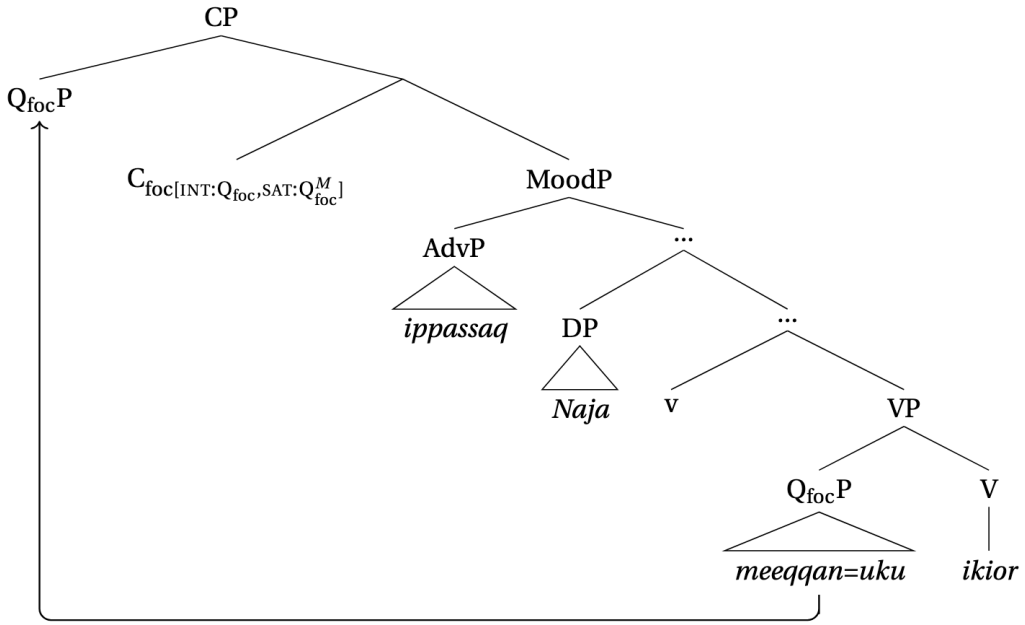
a. LOCATION: C_{foc}

b. SPECIFICATION: [INT:Q_{foc}, SAT:Q^M_{foc}]

To see this in action, consider the derivation in (72) for the example in (71).

(71) **Meeqqa-n = uku** ippassaq Naja-p ikior-ai.
child-PL.ABS = FOC.PL yesterday Naja-ERG help-3SG > 3PL.PART
It was the children that Naja helped yesterday. Ellen Thrane AOX-2

(72) $Q_{foc}P$ FRONTING



The $Q_{foc}P$ *meeqqa-n=uku* is Merged as a sister of V. When C_{foc} is Merged with MoodP, it probes for Q_{foc}, finds *meeqqa-n=uku* and moves it to its specifier. Note that, in contrast to the hyperraising probe, the focus probe is "flat": its satisfaction condition is identical to its interaction condition. In other words, all that is required to focus front is being focused; there is no additional category specification of the satisfaction condition. In section 3.2.4 we motivated this by observing that a wide range of syntactic elements can focus front. This sets focus fronting apart from hyperraising which only applies to DPs, which we modeled with a composite probe. The flatness of the focus probe is key to explaining the absence of cross-clausal focus fronting, a task we take up to next.

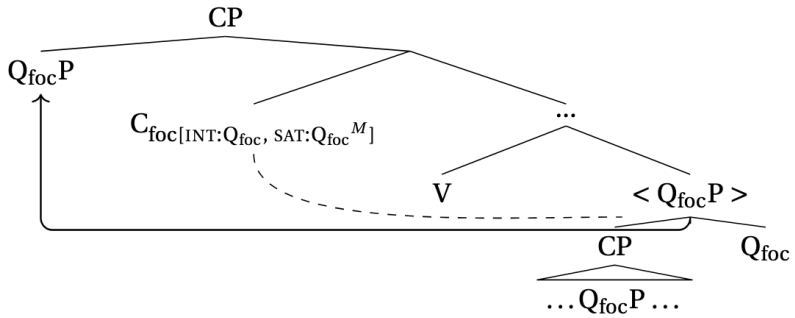
In principle, cross-clausal focus movement could take two forms: one-fell-swoop movement from inside the embedded clause to the specifier of a matrix C_{foc} or successive cyclic movement through the specifier of embedded C heads. As detailed below, neither is available in Kalaallisut.

For one-fell-swoop movement there are two scenarios to consider. The first is a configuration in which the embedded CP is itself focused. In our Q-particle analysis that corresponds to the embedded CP being encased in a Q_{foc} shell. That $Q_{foc}P$ satisfies the matrix focus probe and therefore intervenes between the Q_{foc}-probe on matrix C and any $Q_{foc}P$ inside the embedded clause.[17] This results in focus fronting of the embedded CP, as in (73) and (74).

[17] If closeness is defined in terms of dominance, the intervener is $Q_{foc}P$. If it is defined in terms of c-command, the intervener is Q_{foc}. Either way the probe is unable to probe into the embedded CP.

(73) [Angerla-jaar-tutin = una] uanga eqqaama-giga.
come.home-early-2SG.PART = FOC 1SG.ERG remember-1SG > 3SG.PART
It was that you came home early that I remember. Grethe Schmidt CEH-GS-5

(74) INTERVENTION IN FOCUS FRONTING



The fact that the interaction and satisfaction conditions are identical guarantees that a focused embedded CP will intervene for focus probing: by virtue of being encased in a Q_{foc} shell it can satisfy the probe, which therefore halts without interaction with any potential goals inside the embedded clause. Here we see the importance of the focus being flat. If there was a hypothetical specialized focus probe [INT:Q_{foc}, SAT:Q_{foc} + D^{M}], it would be able to bypass the CP and Agree with a DP encased in a Q_{foc} shell inside the embedded clause. This would trigger cross-clausal movement, on analogy with hyperraising. In other words, on the present analysis, it is the flatness of the focus probe that sets focus fronting apart from hyperraising.[18]

Next we need to rule out one-fell-swoop movement when the embedded CP is not focused, as in (75).

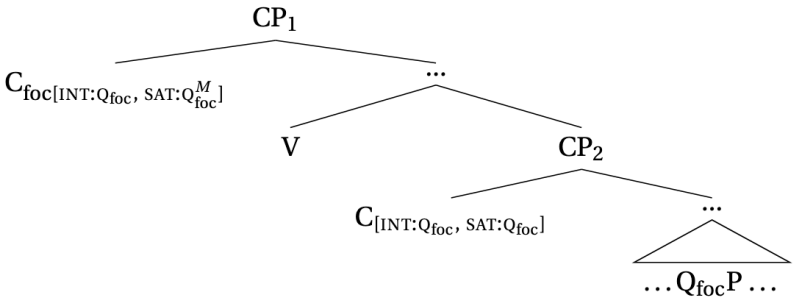
(75) ***Meeqqa-n = uku*** qulari-giga [$_{CP}$ __ iipili-t tillik-kaat].
child-PL.ERG = FOC.PL doubt-1SG > 3SG.PART apple-PL.ABS steal-3PL > 3PL.PART
Intended: It is the children that I doubt stole the apples. Grethe Schmidt CDQ-GS-2

Building on McCloskey (2002), Abels (2003), and Abels (2012) among many others, we assume that embedded C heads obligatorily carry a 'spurious' Q_{foc} feature (to use McCloskey's term). As the name suggests, spurious features are divorced from semantics. A genuine Q_{foc}-feature is hosted by a C head with focus semantics (see below (82) on what that amounts to), whereas a spurious Q_{foc}-feature is hosted by a C head which lacks focus semantics. Within the interaction-satisfaction framework of Agree we understand spurious features as *probe* features as opposed to *goal* features.

[18] As discussed in section 4.3, the category feature on the sister of Q_{foc} is copied onto Q_{foc} as part of the Agree operation that generates number agreement on the focus particle. Therefore this hypothetical composite focus probe would distinguish a focused DP from foci of other categories.

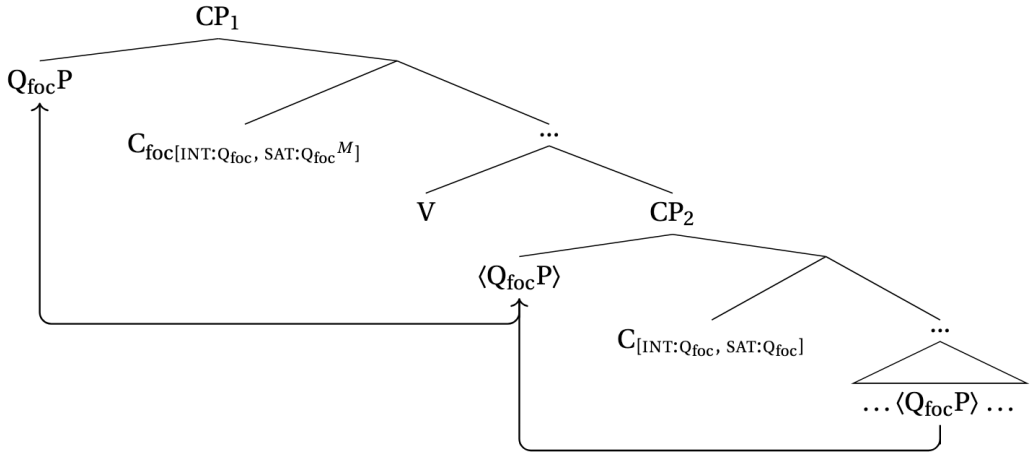
While a Q_{foc} probe feature on the embedded C head is not able to satisfy the matrix Q_{foc} probe, it will defectively intervene between the matrix C_{foc} probe and any embedded $Q_{foc}P$ (Karimi 2013), as seen in (76).

(76) DEFECTIVE INTERVENTION IN FOCUS FRONTING



However, if embedded C heads are endowed with a Q_{foc} probe features, we need to explain why there is no successive cyclic movement derivation for (75), as schematized in (77).

(77) HYPOTHETICAL SUCCESSIVE CYCLIC FOCUS FRONTING



We propose that this follows from the intermediate Q_{foc} probe not triggering movement in Kalaallisut. While a probe Q_{foc} feature on the embedded C head intervenes for one-fell swoop movement into the matrix clause, it does not trigger movement to its specifier and therefore does not enable successive cyclic movement. On this view the difference between languages with successive cyclic A-bar movement and languages without reduces to whether these intermediate Q_{foc} probes trigger movement to their specifier or not. In the notation of Deal (2025), this difference is encapsulated in the probe specifications in (78a) and (78b).

(78) DIFFERING FOCUS PROBE SPECIFICATIONS ON INTERMEDIATE C HEADS

a. [INT:Q_{foc}, SAT: Q^{M}_{foc}] ⇒ SUCCESSIVE CYCLIC MOVEMENT (e.g. English, German, Irish)

b. [INT:Q_{foc}, SAT:Q_{foc}] ⇒ NO SUCCESSIVE CYCLIC MOVEMENT (e.g. Kalaallisut, Georgian)

In contrast a genuine focus C head bears the same probe in languages with and without successive cyclic movement:

(79) UNIFORM FOCUS PROBE SPECIFICATION ON C_{foc}: [INT:Q_{foc}, SAT: Q^{M}_{foc}]

A second configuration to consider is one where both the matrix and embedded C heads are genuine C_{foc} heads and both trigger movement to their specifier. If this is a possible configuration, we might expect cross-clausal focus movement to be possible: the Q_{foc} probe on the embedded C head Agrees with embedded C_{foc}P and moves to its specifier. From that position Q_{foc}P should be able to undergo a second step of focus movement into the matrix clause, since the embedded C head no longer intervenes. For the second author, this configuration does not arise, because embedded focus fronting is not possible to begin with (80).

(80) *Eqqaama-vara [illin = una angerla-jaar-tutit].
remember-1SG > 3SG.IND 2SG.ABS = FOC come.home-early-2SG.PART
Intended: I remember that it was you that came home early.
Grethe Schmidt CQD-GS-2

However, embedded focus fronting *is* possible for the third author (81).

(81) Eqqaama-vara [illin = una angerla-jaar-tutit].
remember-1SG > 3SG.IND 2SG.ABS = FOC come.home-early-2SG.PART
I remember that it was you that came home early. Ellen Thrane CPR-2

And yet, the third author does not allow cross-clausal focus movement (75). We propose that this is an instance of Criterial Freezing (Rizzi 2006). The first movement step is to a criterial position; the focus phrase is interpreted in the embedded clause. It therefore cannot move again to a second criterial position, namely specifier of matrix C_{foc}.[19]

[19] Another possibility is that this has to do with the definition of 'closeness'. If closeness is calculated in terms of dominance rather than c-command, C_{foc}P still intervenes between the matrix C_{foc} probe and the Q_{foc}P in its specifier. On that view the difference between English, on the one hand, and Kalaallisut on the other is the definition of closeness. In English it is calculated in terms of c-command and a phrase does not intervene between a phrase in its specifier and a higher head. In Kalaallisut it is calculated in terms of dominance and the C_{foc}P *does* intervene between a higher probe and the phrase in its specifier. We are not in a position to evaluate this hypothesis against a wider set of data and therefore set it aside.

There is one final question to consider, namely what is the output of the derivation in (77)? There is no movement of the embedded $Q_{foc}P$ to the specifier of the embedded C head, because the Q_{foc} probe feature on the C head does not trigger movement. Nor is there sequential focus movement from the specifier of one focus C head to another, because of Criterial Freezing. If Agree is a fallible operation (Preminger 2011), this account incorrectly predicts that $Q_{foc}P$ can be left in-situ in embedded clauses as in (82).

(82) *Sinnattor-tunga [Naja-p **meeqqa-n=uku** ikior-ai].
dream-1SG.PART Naja-ERG child-PL.ABS=FOC.PL help-3SG>3PL.PART
Intended: It's the children that I dreamt Naja helped. CGU-GS-1

In this structure, the embedded C would Agree with *meeqqa-n=uku* satisfying C's Q_{foc} feature but not move it to its specifier. The challenge is thus to determine what goes wrong in that derivation. To account for this we borrow from Cable's (2010: 64–73) semantics for *wh*-questions, specifically three key assumptions. First, the sister of the Q-Particle has a non-trivial focus semantic value (i.e. is focused). Second, the Q-Particle denotes a variable over choice functions, each of which apply to the set of alternatives denoted by its sister. Finally, the interrogative C head is an operator that binds the variable over choice functions introduced by QP. These carry over to focus fronting as follows. The sister of the Q_{foc}-Particle is focused, i.e. induces alternatives. The Q_{foc} particle denotes a variable over choice functions that pick from these alternatives. Finally the C_{foc} head binds the variable denoted by $Q_{foc}P$. We propose that, at least in Kalaallisut, this binding requires a local relationship between C_{foc} and QP. In the simple cases where QP originates in the same clause as its binder, this local relationship is achieved by movement. In the embedded case we are concerned with here there is no way to obtain this local relationship. First, the embedded C head is not a binder; it is an ordinary C head, not an operator, and thereby divorced from focus semantics. The actual C_{foc} is in the matrix clause and therefore cannot Agree with $Q_{foc}P$ in the embedded clause. Consequently, the required local configuration for binding of the choice function does not obtain and the structure is semantically uninterpretable.[20] The basic pattern is now accounted for. Hyperraising is possible because the embedded CP does not intervene between the hyperraising probe on v and the embedded goal. Cross-clausal focus fronting is impossible because the embedded CP always intervenes for probing into the embedded clause. Before we move on to consider predictions of the proposed analysis, we need to explain the morphology of the focus clitics, specifically their number agreement with the focused phrase.

[20] In Tlingit, such structures can be interpreted via existential closure at the IP level. In that case an indefinite meaning of the wh-phrase results. We propose that Kalaallisut lacks this option, consonant with *wh*-phrases lacking an indefinite reading.

4.3 Number inflection

The realization of Q_{foc} as *=una* or *=uku* is governed by the number feature of the focused DP. If that DP is plural, Q_{foc} is realized as *=uku* (83); if it is singular, Q_{foc} is realized as *=una* (84).

(83) meeqqa-n=uku
child-PL=FOC

(84) meerar=una
child=FOC

So far we have been silent on how this difference is derived, but it is important for understanding the interaction between hyperraising and focus fronting discussed in section 5.1, so we will tackle it here. Our proposal is that the differing number morphology on the Q_{foc} head arises from Q_{foc} probing its sister and copying back its ϕ-features, which include number. More precisely, this probe is specified to interact with any feature (F) and be satisfied by FOC: [INT:F, SAT:FOC]. When it probes the sister of Q_{foc}, i.e. the focused phrase, it copies all the features of that goal (Joshi 2022; Grishin 2023; Deal & Royer 2025), including FOC, category features and ϕ, if present. It is satisfied by FOC and halts. At Vocabularly Insertion, the copied features govern the insertion of *=una* vs. *=uku*. The plural form *=uku* is inserted if the probe copied plural, whereas *=una* is inserted if it didn't copy plural.

(85) [FOC PL] ↔ *=uku*

(86) [FOC] ↔ *=una*

There are thus two contexts where *=una* will be inserted: when the probe on Q_{foc} copied singular (as in (84)) and when there was no number feature to copy.[21] This latter situation is found where the focused phrase is a ϕ-less adverbial as in (87) and (88). In these ϕ-less contexts, the focus particle must surface as *=una*, indicating that *=una* is the elsewhere form:

(87) **Ippassar=una** meeqqa-t Naja ikior-aat.
yesterday=FOC child-PL.ERG Naja.ABS help-3PL>3SG.PART
It was yesterday that the children helped Naja. Ellen Thrane AOV-1

(88) **Qanor=una** oqar-pit?
how=FOC say-2SG.INT
What is is that you are saying? [lit. How is it that you are saying?] Ellen Thrane BIN-2

[21] If one assumes that there is no singular feature in the grammar of Kalaallisut, only plural, then these two conditions collapse into one. The correct forms would still be derived with the Vocabulary Items in (85) and (86).

In (87) the probe on Q_{foc} copies ADV and FOC from *ippassaq*. The most specified Vocabulary Item matching this feature combination is (86) and *=una* is inserted. In (88) the Q_{foc} probe copies ADV, WH, and FOC and, again, the most specified Vocabulary Item that matches this feature combination is (86) and the elsewhere form *=una* is inserted.

5 Two predictions

The analysis developed above makes two predictions. First, hyperraising should feed focus fronting and other movement operations driven by a flat probe should be clause bounded. As we show in turn, both are borne out.

5.1 Hyperraising feeds focus fronting

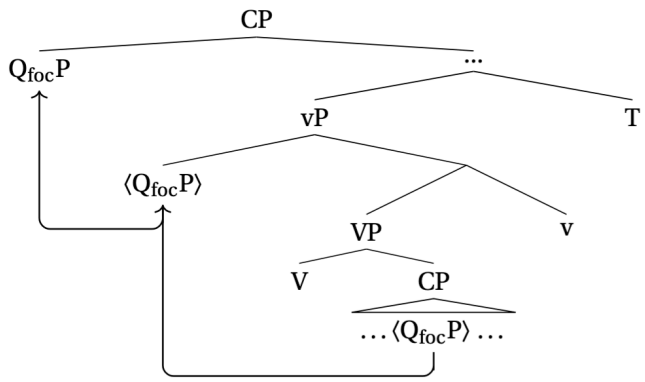
First, recall that on its own focus-fronting cannot cross a finite clause boundary:

(89) *__Illin = una__ uanga eqqaama-giga angerla-jaar-tutit.
2SG.ABS = FOC 1SG.ERG remember-1SG > 3SG.PART come.home-early-2SG.PART
Intended: It is you that I remember came home early. Ellen Thrane CCG-1

However, if hyperraising brings a focused DP into the matrix clause, we predict that the DP can undergo subsequent focus fronting, because the embedded C head no longer intervenes between the matrix C head and the focused phrase. This is indeed the case, as seen in (90). The schematic tree in (91) illustrates the two-step movement.[22]

(90) __Illin = una__ uanga eqqaama-gikkit angerla-jaar-tutit.
2SG.ABS = FOC 1SG.ERG remember-1SG > 2SG.PART come.home-early-2SG.PART
It is you that I remember came home early. Ellen Thrane CCG-3

(91) HYPERRAISING FEEDS Q_{foc}P MOVEMENT



[22] A reviewer notes a parallel with Zulu hyperraising here. In Zulu, hyperraising to object allows the raised object to associate with a matrix focus particle (Halpert & Zeller 2015: 493–494).

How does the first movement step come about, given that the focused DP is encased in a $Q_{foc}P$? We propose that this is possible because of the prior ϕ-Agree operation between Q_{foc} and its sister, which derives the number inflection on the Q-Particle, plural *=uku* vs. elsewhere *=una*. As above, if a probe interacts with a goal, the probe copies *all* features from that goal. Therefore, in addition to ϕ-features, Q_{foc} copies the category feature of the focused element. If the focused element is a DP, that allows it to satisfy the hyperraising probe ([INT:ϕ SAT:ϕ + D^{M}]). Once hyperraised, its inherent Q_{foc} feature allows it to be focus fronted within the matrix clause.

The grammaticality of (90) also shows that the ungrammaticality of (89) is not due to a semantic or pragmatic problem with the intended content. The problem is syntactic: focus fronting cannot cross a clause boundary.

5.2 *Wh*-movement

As seen in (92) and (93), *wh*-movement is also not restricted to DPs, indicating that the *wh*-probe is also "flat": [INT:wh, SAT:wh^{M}].[23]

(92) Qassi-nik Kaali qimme-qar-pa?
how.many-INST Kaali.ABS doq-have-3SG.INT
How many dogs does Kaali have? Ellen Thrane CEM-4

(93) Sooq Naja ani-va?
why Naja.ABS leave-3SG.INT
Why did Naja leave? Ellen Thrane CEM-5

Given spurious *wh*-features on embedded C heads (ala McCloskey 2002; Abels 2003; 2012), the intervention analysis predicts that *wh*-movement is similarly clause bounded. The examples in (94) and (95) bear this out.

(94) *Kikkut sinnattor-pit Naja-p ikior-ai?
who.PL.ABS dream-2SG.INT Naja-ERG help-3SG > 3PL.PART
Who all did you dream that Naja helped? Ellen Thrane CAU-2

[23] A reviewer notes that this probe disallows multiple *wh*-fronting, because the first *wh*-goal it encounters will satisfy the probe. This prediction is somewhat difficult to test because i) apparent multiple *wh*-movement could involve single *wh*-movement of one *wh*-phrase and scrambling of the other *wh*-phrase(s) and ii) *wh*-movement of a second *wh*-phrase to a lower position (see (99)) could also create the appearance of multiple *wh*-movement. What examples like (i) make clear is that multiple *wh*-movement to Spec-CP is not *required*. One *wh*-phrase can surface above an adverb and other below.

(i) Kia-p ippassaq kikku-t ikior-pai?
who-ERG yesterday who-PL.ABS help-3SG > 3PL.INT
Who helped who all yesterday? Ellen Thrane ALU-2

(95) *Kikkut ilimagi-viuk Naja ikior-aat?
who.PL.ERG expect-2SG > 3SG.INT Naja.ABS help-3PL > 3SG.PART
Intended: Who all did you expect to help Naja? Grethe Schmidt CEQ-GS-1

The explanation for the lack of successive cyclic focus fronting carries over to *wh*-movement. Unlike the matrix *wh*-probe, the *wh*-probe on intermediate C heads does not trigger movement and therefore does not result in successive cyclic movement through the specifier of intermediate C heads. In cases of embedded *wh*-movement, Criterial Freezing prevents the *wh*-phrase from moving on to the specifier of matrix C_{wh}. As with focus fronting, hyperraising can feed *wh*-movement in the matrix clause giving the appearance of cross-clausal *wh*-movement in (96).

(96) Kikkut ilimagi-vigit Naja ikior-aat?
who.PL.ERG expect-2SG > 3PL.INT Naja.ABS help-3PL > 3SG.PART
Who all did you expect to help Naja? Grethe Schmidt CEQ-GS-2

Summing up this section, we add *wh*-movement as a second clause-bounded movement to a high position, as in **Table 8**.

landing site	**cross clausal**
high	✗ focus fronting
high	✗ *wh*-movement
low	✓ hyperraising

Table 8: Locality profiles of Kalaallisut movement operations.

6 Alternative analyses

In this section we consider three alternative analyses of the locality contrast between Kalaallisut hyperraising and focus fronting: Delayed Opacity (Deal 2017), Phase Unlocking (e.g. Lee & Yip 2024), and Horizons (Keine 2020). While all three analysis are successful in capturing the Kalaallisut data considered so far, we will argue that i) the intervention analysis makes better predictions than the Delayed Opacity analysis and ii) the intervention analysis is better grounded in language internal facts than a Horizon analysis. As for phase unlocking the outcome of the comparison is less clear cut. Both capture the available data and they are grounded in the same language internal facts. Our reason to put forth the intervention analysis is that we find its theoretical underpinning more appealing—intervention is conceptually simple and well-established—and leaner in that the intervention analysis does away with phases (Halpert & Zeijlstra 2024).

6.1 Delayed Opacity

Deal (2017) investigates hyperraising to object in Nez Perce (Sahaptian, Idaho) and develops an analysis in terms of DELAYED OPACITY. The intuition behind the Delayed Opacity analysis is that a low probe can "pull" a phrase out of a phase before that phase seals off, but a high probe cannot. In other words, contra Keine's Height-Locality Connection, lower is freer. Crucially "low" means below then next higher up phase head and "high" means above the next higher up phase head. Specifically, if a probe is below the lowest matrix phase head, it can interact with a goal inside an embedded clause, because the embedded CP phase is not sealed off until that lowest matrix phase head is Merged. In contrast, if a probe is above the lowest matrix phase head it cannot probe into the embedded CP, because that lowest matrix phase head seals it off. To understand the predictions of the two analyses, we need to establish which categories are phase heads in Kalaallisut. Here we rely on Compton & Pittman's (2010) argument that vP is not a phase in Inuit, and that the only phase heads and C and D. Under this assumption, the Delayed Opacity analysis accounts equally well for the data considered so far: because the hyperraising probe is both low (below the matrix C phase head) *and* fails to intervene both analyses predict hyperraising to be possible. Because the focus fronting probe is both high (not below the matrix C phase head) *and* acts as an intervener, both analyses predict cross-clausal focus fronting to be impossible, as noted in **Table 9**.[24]

	non-intervening low probe	**intervening high probe**
Delayed Opacity	✓	✗
Intervention	✓	✗

Table 9: Shared predictions of delayed opacity and intervention analyses.

In principle, however, it is possible to tell the two analyses apart. If a non-intervening probe is high, the intervention analysis predicts cross-clausal movement to be possible, whereas the Delayed Opacity analysis predicts it to the impossible. Conversely, if an intervening probe is low, the intervention analysis predicts cross-clausal movement to be impossible, whereas the Delayed Opacity analysis predicts it to be possible. These predictions are schematized in **Table 10**.

We are not aware of any phenomena in Kalaallisut that instantiates the first column. It is true that regular clausal agreement has been argued to involve a high probe—in C by Compton (2018) and in dedicated Agr projections above MoodP by Yuan (2018)—but if v is not a phase, Agree with Voice-internal subject and object DP goals will involve regular within-phase Agree under either

[24] Deal (2017:12) makes it clear that to be able to probe into a phase the probe must be *below* the next phase head up. Since the FOC probe is *on* the C phase head and not below it, the Delayed Opacity analysis correctly rules out cross-clausal focus fronting.

	non-intervening high probe	intervening low probe
Delayed Opacity	✗	✓
Intervention	✓	✗

Table 10: Differing predictions of delayed opacity and intervention analyses.

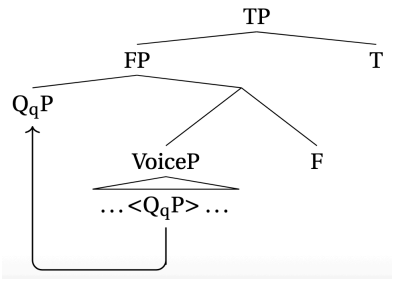
analysis. We therefore set the first column aside and turn to the second column: are there instances of an intervening low probe? Here we suggest that this is instantiated by low *wh*-movement. The examples of *wh*-questions considered so far all have the *wh*-phrase in initial position, which we assume to be specifier of CP. However, Kalaallisut also has *wh*-medial questions:

(97) Meeqqa-t kina ikior-paat?
child-PL.ERG who.ABS help-3PL>3SG.INT
Who have the children helped? Ellen Thrane AGO-2

(98) Ippassaq kia-p pani-a angerla-jaar-pa?
yesterday who-ERG daughter-3SG>3SG.ABS come.home-early-3SG.INT
Whose daughter came home early yesterday? Ellen Thrane ABJ-5

Following Sherkina-Lieber's (2005) analysis of Inuktitut, we assume that *wh*-medial orders involve short *wh*-movement to a position between TP and VoiceP. As above, *wh*-movement is implemented as Q_qP movement.[25]

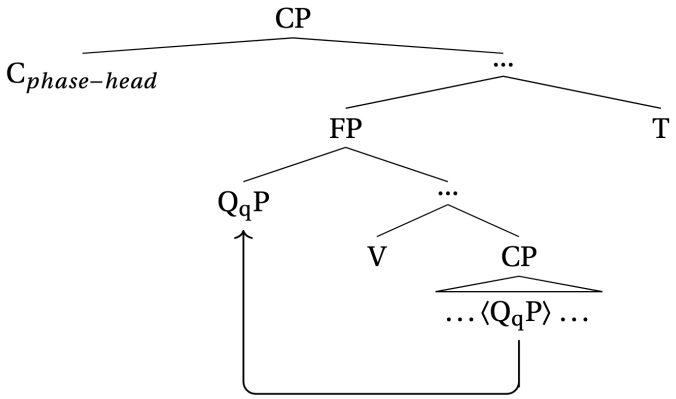
(99) LOW *wh*-MOVEMENT



With these two assumptions in place, we can consider the predictions made by either analysis. The intervention analysis predicts low *wh*-movement into the matrix clause to be ungrammatical, because the *wh*-probe is an intervenes. The Delayed Opacity analysis, in contrast, predicts low *wh*-movement into the matrix clause to be possible because it is to a position (spec-FP) below the next up phase head (matrix C):

[25] A reviewer points out that the S(O)V word orders in (97) and (98) are also compatible with a *wh*-in situ analysis. This alternative analysis weakens the argument against the delayed opacity analysis developed in the text. If there is no *wh*-movement to a low position in Kalaallisut, we do not expect cross-clausal *wh*-movement to a low position under the Delayed Opacity analysis.

(100) CROSS-CLAUSAL LOW *wh*-MOVEMENT



In fact cross-clausal low *wh*-movement is ungrammatical:

(101) *Juuna kikkut oqar-pa angerla-jaar-ner-sut?
Juuna.ABS who.PL.ABS say-3SG.INT come.home-early-if-3PL.PART
Intended: Who all did Juuna say came home early? Grethe Schmidt BUQ-GS-2

(102) *Naja-p suna oqarfigi-vaatit meeqqa-t tillik-kaat?
Naja-ERG what.ABS say.to-3SG>2SG.INT child-PL.ERG steal-3PL>3SG.PART
Intended: What did Naja tell you that the children stole? Grethe Schmidt CDX-GS-4

If the analysis of low *wh*-movement is corroborated, the ungrammaticality of (101) and (102) would provide an argument in favor of intervention analysis over the delayed opacity analysis.

6.2 Phase unlocking

The second alternative analysis is inspired by Lee & Yip's (2024) analysis of hyperraising in Cantonese and Vietnamese, which combines composite probing with PHASE UNLOCKING (e.g. Rackowski & Richards 2005; van Urk & Richards 2015; Branan 2018; Davis & Branan 2019; Hedding & Yuan 2025; Little 2025).[26] By virtue of ϕ-Agree with the embedded CP phase, the hyperraising probe unlocks the phase and probes the embedded subject DP, which results in hyperraising. While a composite hyperraising probe is central to both the intervention and phase unlocking analyses, the logic of the two analyses is the inverse of each other. In the intervention analysis a phrase is free to move across a clause boundary (no Phase Impenetrability Condition) unless another goal intervenes. On a phase unlocking analysis a phrase is unable to move across a phase boundary unless the phase is unlocked by Agree.

[26] Lee & Yip (2024) refer to phase unlocking as phase deactivation.

Within the interaction-satisfaction theory of Agree, unlocking of a phase is the result of a probe *interacting* with a phasal XP but not being *satisfied* by it. We assume the same probes as on the intervention analysis: a composite hyperraising probe with differing interaction and satisfaction conditions—[INT:ϕ, SAT:$\phi + D^M$]—and a flat focus probe with identical interaction and satisfaction conditions; [INT:Q_{foc}, SAT:Q_{foc}]. The assumptions about the featural make-up of CP (ϕ-features but no D feature) are also the same. The hyperraising probe can interact with the embedded CP by virtue of the embedded CP bearing ϕ-features, but it not satisfied by it, since the embedded clause lacks a D feature. This explains the existence of hyperraising in Kalaaallisut.

Turning to focus fronting, there are two cases to consider. If the embedded CP is itself focused, it satisfies the focus probe and probing halts without the probe interacting with a possible goal inside the embedded CP. This is movement *of* a phasal CP, not movement across it, and no phase unlocking is involved. If the embedded CP is not focused, the Phase Impenetrability Condition prevents the focus probe from probing into the embedded CP. The focus probe cannot unlock the embedded phase and render the Phase Impenetrability Condition inactive because the embedded CP does not bear a focus feature that would allow the matrix focus probe to interact with it. Without interaction there is no phase unlocking. The same reasoning applies to *wh*-movement, which too can target *wh*-phrases of various categories (minimally DPs and adverbs). The relevant probe therefore has identical interaction and satisfaction conditions [INT:wh, SAT:wh] and is unable to unlock the embedded CP phase. The lack of unlocking depends only on probe specification and not on probe location. Therefore the lower *wh*-probe on Foc responsible for low *wh*-movement (Sherkina-Lieber 2004) also cannot unlock the embedded CP, which explains the ungrammaticality of cross-clausal low-wh movement as well.

Since the empirical coverage of the phase analysis is as good as that of the intervention analysis, we must consider their analytic and theoretical assumptions. Since the two analyses make the same analytic assumptions—i) CPs bear ϕ-features, but not D features; ii) the hyperraising probe is composite; and iii) the focus and *wh*-probes are flat—we cannot differentiate them on analytic grounds. That leaves us with theoretical considerations. Here we believe the intervention analysis comes out on top. If phases define cyclic spell-out domains and spell-out renders the complement of the phase-head impenetrable for syntactic operations, the spell-out domain of a lower phase is spelled out before a higher phase head is Merged. Then how is phase unlocking by a phase external probe possible? Despite sporadic mentions of this, e.g. Lee & Yip (2024: fn. 23), it seems to us a fundamental architectural mystery. In contrast, the intervention analysis relies solely on well-established conditions on Agree.[27] In addition, the intervention analysis does not assume phases (Halpert & Zeijlstra 2024), and the phase unlocking analysis

[27] With the caveat that defective intervention deserves further elaboration.

does. Other things being equal, this makes the intervention analysis more attractive on grounds of theoretical simplicity.

6.3 Horizons

In addition to arguing for the Height-Locality Connection, Keine (2020) develops a theory of locality, according to which individual probes may be associated with a HORIZON.[28] A horizon is a particular category feature that determines which domains are inaccessible to the probe. For instance, if a probe has horizon T it cannot probe into TP. If a probe lacks a horizon, it can keep probing. In this system, the Kalaallisut hyperraising probe lacks a horizon, whereas the Q_{foc} probe on C has horizon C. The latter means that the focus probe will abort its search when it encounters the embedded CP and therefore be unable to probe into it. This correctly captures the clause-boundedness of focus fronting. Setting phases aside for the moment, leaving the hyperraising probe without a horizon also seems to capture its behavior: nothing forces it to abort its search upon encountering CP and it can therefore probe into the CP and hyperraise an embedded DP. However, Keine (2020) argues that there are two types of locality constraints: horizons and phases. If so, the question of how the hyperraising probe probes into the embedded CP—given that it is a phase—is left unanswered. We could add phase unlocking to the horizon system and create a double-tiered analysis that employs both phase unlocking and horizons. If the phase unlocking analysis can capture the same facts on its own, that seems preferable to a dual analysis. A second point is that the intervention analysis is grounded in language specific facts that the horizon analysis does not take into account. The ability of the hyperraising probe to probe past an embedded CP is predicated on the fact that clausal complements do not bear a D feature in the language, as evidenced by their inability to bear case. That connection is lost under the horizon analysis, where the larger search domain of the hyperraising probe is attributed to its lack of a horizon. Second, the fact that an embedded CP *does* intervene for focus fronting and *wh*-movement is a consequence of these probes being flat: whatever they interact with satisfies them. That in turn is forced by distributional facts: as shown in section 3.2, any phrase capable of being focused can focus front. Similarly, there is no category restriction on which phrases can front in *wh*-questions, indicating a non-picky probe. On the horizon analysis, the difference between cross-clausal hyperraising on the one hand and clause-bounded focus fronting and *wh*-movement on the other is basically an accident.

7 Cross-linguistic variation

Our starting point was the observation that the locality profiles of English A and A-bar movement are the opposite of the locality profiles of A and A-bar movement in Kalaallisut. This opposition

[28] We thank Stefan Keine for discussion of a horizon analysis of the Kalaallisut facts.

is illustrated in **Tables 11** and **12**, where high indicates A-bar movement and low indicates A-movement):

landing site	cross-clausal
high	✓
low	✗

Table 11: High less restricted than low: e.g. Atchan, English, Nuntajɨiji, Tiwa.

landing site	cross-clausal
high	✗
low	✓

Table 12: Low less restricted than high: Kalaallisut.

Once we look more broadly, we find that *all* logically possible combinations of Height Locality connections are attested. In addition to the English and Kalaallisut patterns in **Tables 11** and **12**, we can add the two patterns in **Tables 13** and **14**:[29,30]

landing site	cross-clausal
high	✗
low	✗

Table 13: High and low equally restricted: Tsez, Polish, Russian.

Under the present analysis, this variation can be described in terms of intervention in A- and A-bar movement, as in **Table 15**.

In English intervention for A-movement prevents hyperraising, whereas successive-cyclic movement enables cross-clausal A-bar movement. Brazilian Portuguese and Kipsigis likewise

[29] ✗ and ✓ represent specific movement operations, not the language as a whole. For instance, the ✓ in **Table 11** above indicates that there is a least one movement operation to a high position that can cross a finite clause boundary and ✗ indicates that there is at least one movement operation to a low position that cannot cross a finite clause boundary.

[30] We are grateful to the speakers and linguists who have contributed data and insight into this larger cross-linguistic project: Shweta Akolkar (Hindi), Kenneth Baclawski (Eastern Cham), Tanya Bondarenko (Georgian), Maddy Bossi (Kipsigis), Max Dabkowski (A'ingae), Ginny Dawson (Tiwa), Alex Elias (Jao), Ksenia Ershova (West Circassian), Becky Everson (Shekgalagadi), Steven Foley (Georgian), Vera Gribanova (Russian), Jorge Hankamer (Turkish), Larry Hyman (Limba), Becky Jarvis (Atchan), Tyler Lemon (Uab Meto, Vietnamese), Franco Liu (Northern Tudja), Wendy López-Marquez (Nuntajɨiyi), Lev Michael (Nihagantsi languages), Léa Nash (Georgian), Zach O'Hagan (Caquinte), Wesley dos Santos (Brazilian Portuguese, Kawahiwa), and Hannah Sande (Guebié).

landing site	**cross-clausal**
high	✓
low	✓

Table 14: High and low equally unrestricted: e.g. Brazilian Portuguese, Kispigis.

	NO A-INTERVENTION	**A-INTERVENTION**
NO A-BAR INTERVENTION	Brazilian Portuguese,	English, Atchan, Nuntajɨɨji,
	Kipsigis, …	Tiwa, (a variety of) West Circassian, …
A-BAR INTERVENTION	Kalaallisut	Polish, Russian, Tsez

Table 15: Locality profiles by movement type.

allow successive cyclic A-bar movement and additionally hyperraising due to lack on A-intervention. Polish, Russian and Tsez (Polinsky & Potsdam 2001) lack both successive cyclic movement and hyperraising, i.e. unmitigated intervention in both movement domains. Finally, as we have seen, there is no intervention for A-movement in Kalaallisut but also no successive cyclic A-bar movement.

In the remainder of this section we will sketch an analysis of this cross-linguistic variation based on the particular analysis of Kalaallisut developed above.

Starting with A-movement, the presence of A-intervention comes down to two factors: the specification of the A-probe and the featural content of CP. The interaction of these two factors, under an intervention analysis, is schematized in **Table 16**. Hyperraising (HR) is the result of lack of intervention; lack of hyperraising (*HR) is the result of intervention.

	CP	**CP**$_{\phi}$	**CP**$_{\phi + D}$
[INT:ϕ, SAT:ϕ + D^{M}]	HR	HR	*HR
[INT:ϕ, SAT:ϕ^{M}]	HR	*HR	*HR

Table 16: A-movement probe specification.

The middle cell in the first row corresponds to Kalaallisut and the rightmost cell in the bottom row to English. We hypothesize that other cells are cross-linguistically instantiated too. This typology makes predictions about probe specification and the featural content of C in individual languages (cf. Halpert 2019). If a language has hyperraising, we predict that CP lacks a D feature. It may or may not bear ϕ features. If a language lacks hyperraising we predict that i) CP bears a D feature and/or ii) the A-probe is flat.

Turning to A-bar movement, there are two factors that govern intervention and thereby the availability of cross-clausal movement: i) presence or absence of spurious A-bar features on intermediate phase heads, ii) whether these spurious A-bar probes trigger movement. The resulting three options are displayed in **Table 17**, where CC = cross-clausal movement; WEAK PROBE = probe that does not trigger movement; and STRONG PROBE = probe that triggers movement.

	ABSENT	**WEAK**	**STRONG**
SPURIOUS PROBE	CC	*CC	CC

Table 17: Presence and strength of spurious Abar probe.

Kalaallisut instantiates the middle cell. For languages with cross-clausal A-bar movement there are in principle two possibilities, depending on where there is an intermediate probe. If there is, it is strong and results in successive cyclic movement. In language with that probe specification we might expect to see the kinds of morphosyntactic reflexes of intermediate movement documented over the last four decades (e.g. Chung (1982) on Chamorro; McCloskey (2002) on Irish; Van Urk (2015) on Dinka). If there is no intermediate probe, cross-clausal movement proceeds in one fell swoop and we expect no morpho-syntactic reflexes of movement at intermediate CP edges.

8 Conclusion

The main empirical conclusion of this paper is that Keine's Height-Locality Connection in (103) cannot be maintained as a universal: movement to a lower position (hyperraising) is sometimes freer than movement to a higher position (focus fronting).

(103) HEIGHT–LOCALITY CONNECTION Keine (2020:12)
Movement types differ in their landing sites. The higher the landing site of a movement type is in the clausal structure, the more kinds of structures are transparent to this movement type.

Detailed case studies of hyperraising and focus fronting in Kalaallsut reveal that their differing locality profiles are not due to their landing site, but to probe specification and distribution. A-bar probes on embedded CPs (Abels 2003) intervene for one-fell-swoop cross-clausal focus fronting and *wh*-movement. Because the Kalaallisut version of these probes do not trigger movement, successive cyclic movement is also impossible. This accounts for the lack of cross-clausal focus fronting. Hyperraising, i.e. cross-clausal A-movement, is possible, because there is no intervention to begin with. In the interaction-satisfaction framework intervention is caused by satisfaction.

Embedded CP lack a D feature and the hyperraising probe is only satisfied by a goal bearing ϕ *and* D. Hence the embedded CP does not intervene and the hyperraising of a lower DP is possible.

A typological contribution of the present study is the demonstration that all four logical combinations of A and A-bar intervention are attested. The analytic underpinnings of the typology make predictions about individual languages. For instance the presence of hyperraising in a language makes empirical predictions about the featural content of complementizers based on different raising probe specifications. It also highlights that distinct constellations of factors can lead to seemingly identical outcomes, e.g. cross-clausal A-bar movement can result from the absence of an A-bar probe on intermediate C heads or from the presence of a movement-triggering probe. More investigation is needed to draw out the empirical implications of this.

On the theoretical side, this variation calls for more attention within theories of successive cyclic movement to how successive cyclic movement is "turned off". Here we have suggested that the existence vs. absence of successive cyclic movement hinges on the specification of probes on intermediate C heads, specifically whether they trigger movement. Other theories of successive cyclic movement lend themselves to different explanations. McCloskey (2002) doesn't explicitly discuss lack of successive cyclic movement, but a natural explanation within his analysis is to say that the distribution of spurious A-bar features differs cross-linguistically. A language like Irish has spurious A-bar features, as does English. Kalaallisut lacks them. On the phase balance approach by Heck & Müller (2000) this comes down to constraint ranking. In Irish and English the PHASE BALANCE and PHASE IMPENETRABILITY CONDITION constraints that force intermediate movement outranks the LAST RESORT constraint on movement the result is successive cyclic movement. On this approach Kalaallisut would have the opposite constraint ranking: LAST RESORT outranks PHASE BALANCE and PHASE IMPENETRABILITY CONDITION and thereby prevents cross-clausal movement. A final theoretical concern is how defective intervention should be formally understood and implemented within a Agree-based analysis of movement. We have leaned on Karimi's (2013) analysis of Kurdish agreement, which pins defective intervention on intervening probe features. It is, however, not entirely obvious how to implement that within the interaction-satisfaction of Agree assumed here. We leave a full implementation for future research.

Abbreviations

ABS = absolutive, ALL = allative case, AP = antipassive, APPL = applicative, CAU = causative mood, CON = conditional mood, CONJ = conjunction, CONT = contemporative mood, ERG = ergative, FOC = focus, FUT = future, HAB = habitual, IND = indicative mood, INT = interrogative mood, IP = intransitive participle, NEG = negation, NOMZ = nominalizer, PART = participial mood. 1SG > 3SG.IND means 1st person singular subject acting on third person singular object in indicative mood.

Ethics and consent

The research reported in this article was carried out under Protocol 2022-04-15264 approved by the UC Berkeley Office for the Protection of Human Subjects.

Acknowledgements

We are grateful to two generous anonymous reviewers for their insightful comments and to Chris Beier, Seth Cable, Jessica Coon, Amy Rose Deal, Vera Gribanova, Boris Harizanov, Akil Ismael, Peter Jenks, Stefan Keine, Carol Rose Little, Franco Liu, Jim McCloskey, Naja Blytmann Trondhjem, and audiences at UC Bekeley and University of Arizona for discussion of this material. A special thanks to Emily Clem who provided comprehensive feedback on a previous draft.

Competing interests

The authors have no competing interests to declare.

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