Focus feature percolation: Evidence from Tundra Nenets and Tundra Yukaghir
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1 Basic data

• This paper intends to enhance the empirical basis for the typology of constituent questions and syntactic islands by presenting new data on systematic island constraints violations in two languages of the extreme north of Eurasia, Tundra Yukaghir (TY, north-eastern Siberia, isolate) and Tundra Nenets (TN, north-western Siberia, Uralic). Both languages display a total lack of strong island effects in questioning.

• Relative and adverbial clauses are headed by non-finite verbal forms such as participles, action nominals or converbs, and the wh-word remains in-situ.

(1) a. [[xan’ana yil’e-wi?] n’enec’] xaya
   where live-PF-PTCP man go.3SG
   lit. ‘The man who lived where left?’

   b. Pet’a [Wera-h ñomke-m xada-qma-xad’] to-sa?
      Petya Wera-GEN what-ACC kill-PF-AN-ABL come-INTERR.PAST.3SG
      lit. ‘Petya came after Wera killed what?’

(2) a. [[qadunudəŋ u-nu-j] kōde] ñol-k?
    whither go-IMP-PTCP person be-NEUTFOC.INTERR.2SG
    lit. ‘You are a person who goes where?’

   b. [neme lew-raq] qudo-1-ŋu?
      what eat-SS.CVB lie-NEUTFOC.INTERR.3PL
      lit. ‘While eating what are they lying?’

• While TN and TY behave identically with respect to questions, they diverge with respect to the other types of filler-gap dependencies. In TN relativisation and topicalisation obey island constraints, while in TY they do not, similar to questioning. This difference is illustrated below for topicalisation out of adversarial clauses.

(3) a. “ti [n’ts’a-nta __ xada-qma-xad’] Wera xaya-s’
      reindeer father-GEN.3SG kill-PF-AN-ABL Wera go-PAST.3SG
      ‘The reindeer, Wera left after his father killed __.’

   b. ərojo-la met ma=kwelekən [ama-gi met-in __ ki-ld-ŋa]
      knife-ACC 1SG ex=leave.NEUTFOC.INTR.1SG father-3POSS 1SG-DAT give-3-DS.CVB
      ‘Knife, I left after his father gave __ to me.’

• This suggests that islands violations in questions do not come from the same source as in other types of extractions. We will argue that it has to do with how focussing works in these languages, cf. Matić (2014).

• Among various explanations for question islands violations even in well behaved languages, it has been suggested that the issue may not be the nature of the filler-gap dependency itself, but the focusability of certain types of structures: only those structures which are focusable can be subject to inquiry (Erteschik-Shir 1973, 2007; Van Valin 1994, 2005).

• Syntactic islands such as relative and adverbial clauses are known to be inherently presupposed and therefore cannot normally function as the locus of focusing operations (Fregé 1892; Lambrecht 1994; Erteschik-Shir 2007). However, if an island clause is embedded into the matrix clause which itself is presupposed or easily presupposable (e.g. an existential clause), the island is the only candidate for focusing (Shimojo 2002; Erteschik-Shir 1973, 2007).

• In languages like Danish, on which Erteschik-Shir’s original proposal was based, focusability shift is observed when pragmatic/semantic factors conspire to render the island clause focusable. This reverses the focusability relationship and renders the questioned island the main point of the utterance.

(4) Hvad for en slags is er der mange børn [der kanli‘ __]?
   What kind of ice cream are there many children who like
   ‘What kind of ice cream are there many children [who like __]?’

• TN and TY achieve the same effect through grammar, by formally treating phrases with focussed sub-constituent as focused. The focused sub-constituent remains in-situ but the focus feature percolates up to the mother node to provide an account of the pied-piping effects.

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2. Focus meaning and focus marking

- We apply Alternative Semantics for focus (Rooth 1992; Krifka & Musan 2012), according to which focus is an operator that triggers common ground update via invocation of alternatives. While the ordinary semantic value, ignoring the contribution of focus, is a standard proposition, the focus semantic value is a set of propositions that differ from each other only in that the denotatum of the focused expression is replaced by another object of the same type.

- To constrain the focus semantic value to relevant alternative propositions, a context variable C is introduced, referring to a contextually determined set of alternatives, along with a focus operator which induces the requirement that C be a subset of focus-induced alternatives (Q).

(5) \textit{JOHN arrived.}
   a. ordinary semantic value: \(\lambda w.\text{John arrived in } w\)
   b. focus semantic value: \(Q = \lambda p \exists x \{ p = \lambda w.\text{John arrived in } w \}\), where \(C \subseteq Q\)

- This is identical to the semantics for questions, according to which the meaning of a question is a set of contextually relevant propositions corresponding to the answer (Hamblin 1973; Hagstrom 1998). For instance, the question \textit{Who arrived?} and the answer with the focus on the subject, e.g. \textit{JOHN arrived}, have an identical focus-semantic value, the set of propositions of the form \(x \text{ arrived}\), where \(x\) is a variable over entities constrained by the variable \(C\). The difference between questions and the answers is the identification of one true alternative in the latter.

- Following Abusch (2010), we assume that wh-words are a subtype of focus with a semantic contribution of their own. Minimally, they are soft presupposition triggers; the presupposition induces existential quantification over the question word and thus creates the ordinary semantic value with specific indefinite interpretation.

(6) \textit{Who arrived?}
   a. ordinary semantic value: \(\lambda w(\exists x).x \text{ arrived in } w\)
   b. focus semantic value: \(Q = \lambda p \exists x \{ p = \lambda w.\text{John arrived in } w \}\), where \(C \subseteq Q\)

- Focus can also be associated with certain focus-sensitive items which are commonly interpreted as quantifying over alternatives and are therefore focus-sensitive. In this paper we only deal with \textit{only} and assume the following semantics for it based on König (1991), Horn (1996), and Krifka (1998):

(7) \textit{Only JOHN arrived.}
   a. ordinary semantic value: \(\lambda w.\text{JOHN arrived in } w\)
   b. focus semantic value: \(Q = \lambda p \forall x \{ p = \lambda w.\text{JOHN arrived in } w \Rightarrow x=\text{JOHN} \}\), where \(C \subseteq Q\)

- These three types of focus are encoded identically in both TN and TY.

- In Tundra Nenets focussed objects cannot trigger object agreement on the verb, although a non-focused object can, cf. (8) and (9).

(8) ‘optional’ object agreement
   a. Wera-h ti-m xadaa(-da)
      Wera-GEN reindeer-ACC kill.3SG(>SG.OBJ)
      ‘He killed Wera’s reindeer.’
   b. serako ti-m xadaa(-da)
      white reindeer-ACC kill.3SG(>SG.OBJ)
      ‘He killed the white reindeer.’

(9) focussed objects
   a. questions and answers
      ŋŋmek-m xadaa(-da)? ti-m xadaa(-da),
      what-ACC kill-INTER.3SG(>SG.OBJ) reindeer-ACC kill.3SG(>SG.OBJ)
      ‘What did he kill? — He killed a REINDEER.’
   b. focus-sensitive -r’i/-l’i- ‘only’
      te-r’i-m xadaa(-da)
      reindeer-ONLY-ACC kill.3SG(>SG.OBJ)
      ‘He only killed a REINDEER.’

- In Tundra Yukaghir, agreement in person/number is always with the subject, but its form depends on what non-subject element is in focus. It can be chosen either from the SFOC paradigm or from the OFOC paradigm or from the NEUTFOC paradigm.

<table>
<thead>
<tr>
<th>Focused element</th>
<th>Focus marking</th>
<th>Focus agreement on the verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>-()l/-lΩn</td>
<td>SFOC</td>
</tr>
<tr>
<td>O</td>
<td>-()l/-lΩn</td>
<td>OFOC</td>
</tr>
<tr>
<td>A</td>
<td>Ø</td>
<td>Ø</td>
</tr>
<tr>
<td>Oblique</td>
<td>Ø</td>
<td>NEUTFOC</td>
</tr>
</tbody>
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2
(10) questions and answers

a. S-focus

kin-ek evara-1? Ma:rqo-n kóde-k evara-1
who-FOC walk-SFOC(3SG) one-GEN man-FOC walk-SFOC(3SG)
‘Who went (there)? — One MAN did.’

b. O-focus

neme-ləŋ iŋc:-məŋ? Labunmə-ləŋ iŋc:-məŋ.
what-FOC fear-OFOC.1/2SG ptarmigan-FOC fear-OFOC.1/2SG
‘What do you fear? — I fear PTARMIGANS.’

c. A-focus

tet-qano kin-Ø tite we:-Ø? sl=tet-Ø tite we:-Ø met-ul?
you-ACC who-Ø so do-Ø NEG=you-Ø so do-Ø 1SG-ACC
‘Who treated you like that? — Didn’t YOU treat me like that?’

d. oblique focus

qadaŋqudəŋ kweːj? Moskva-giːn kweːc
whether go.NEUTFOC(INTERR.3SG) Moscow-DAT go.NEUTFOC.3SG
‘Where did he go? — He went to MOSCOW.’

(11) focus sensitive mo:rqo:n ‘only’

mo:rqo:n lačiləŋ ičoː-mlə / *lačilə ičoː-m
only fire.FOC look-OFOC.3SG fire.ACC look-NEUTFOC.3SG
‘He only saw FIRE.’

• In sum: both TN and TY have complicated systems of focus marking on core arguments and focus-sensitive agreement. This equally applies to wh- and non-wh types of focus.

3. Focussing subconstituents

• In both languages if a sub-constituent of a complex phrase is interpreted as focussed, the whole phrase is treated as focus for the purpose of focus marking and agreement.

• In TN if a subconstituent of the object NP (a possessor, a modifier, a complement, etc.) is focused, agreement with the object is impossible, suggesting that the whole NP is marked as focus.

(12) possessor

[xib’a-h ti-m] xada-sa(-da)? [Wera-h ti-m] xadaa(-da).
who-GEN reindeer-ACC kill-INTERR.PAST.3SG(>*SG.OBJ) Wera-GEN reindeer-ACC kill.3SG(>*SG.OBJ)
‘— Whose reindeer did he kill? — He killed WERA’s reindeer.’

(13) modifier

[xurka ti-m] xada-sa(-da)? [serako ti-m] xadaa(-da).
what.kind reindeer-ACC kill-INTERR.3SG(>*SG.OBJ) white reindeer-ACC kill.3SG(>*SG.OBJ)
‘— What kind of reindeer did he kill? — He killed a WHITE reindeer.’

(14) complement

[[təmek-h n’amma] ləx’nako-m] wad’e-ca-nº? / *wad’e-ca-rº?
what-GEN about tale-ACC tell-INTERR-2SG / tell-INTERR-2SG>SG.OBJ
‘A fairy tale about what did you tell?’

[[t’on’a-h n’amma] ləx’nako-m] wad’eqqa-dºm / *wad’eqqa-wº
fox-GEN about tale-ACC tell-1SG / tell-1SG>SG.OBJ
‘I told a fairy tale about a FOX.’

(15) focus-sensitive only

a. possessor

[Wera-r’i-h ti-m] xadaa-dºm / *xadaa-wº
Wera-ONLY-GEN reindeer-ACC kill-1SG / kill-1SG>SG.OBJ
‘I only killed WERA’s reindeer.’

3
b. modifier

[parid'en'a-'ri ti-m] xadax(*-da).
black-ONLY reindeer-ACC kill.3SG(*>SG.OBJ)

‘He only killed a BLACK reindeer.’

c. complement

[t'on'a-'ri-h n'amna lax'nako-m] wad'eqpa / *wad'eqpa-da
fox-only-GEN about tale-ACC tell-3SG / tell-3SG>SG.OBJ

‘He told a fairy tale only about A FOX.’

• Similarly, in TY if a modifier or a possessor is in focus, the whole NP behaves like focus (complements in TY can be only attached to an NP as relative clauses headed by the copula, so they effectively do not exist as a separate syntactic category).

(16) possessor

[kin nime-da-ya] ewre:-nu-k?
who house-3-LOC walk-IMPF-NEUTFOC,INTR.2SG friend house-3-LOC walk-IMPF-NEUTFOC,INTR.1SG

‘To whose house are you going? – I’m going to a FRIEND’s house.’

(17) modifier

[pure-n] [neme nime-k] oyo:la:-l?
[joqon nime-k] oyo:la:-l.

above-LOC what house-FOC stand-SFOC(3SG) Yakut house-FOC stand-SFOC(3SG)

‘What kind of house stands on the top? – A YAKUT house stands (there).’

• Island clauses behave identically to simple NPs with respect to focus-sensitive agreement and focus-sensitive marking.

• In TN, if any sub-constituent of a relative clause is focused and the relative clause modifies the object of the main verb, this verb cannot be marked for object agreement.

(18) focus on the relative clause subject

a. [xib'a-h] [xada-wi'] ti-m mane-ca-n° / *mane-ca-r°
who-GEN kill-FF.PTCP reindeer-ACC see-INTERR-2SG / see-INTERR-2SG>SG.OBJ

‘You saw the reindeer killed by whom?’

b. [Wera-h] [xada-wi°] ti-m maneqqa-dm° / *maneqqa-w°
who-GEN kill-FF.PTCP reindeer-ACC see-1SG / see-1SG>SG.OBJ

I saw the reindeer killed by WERA.’

(19) focus on an adjunct

a. [[Wera-h] s'ax'h xo-wi°] noxa-m] [xada-sa-n° / *xada-sa-r°
Wera-GEN when find-FF.PTCP polar.fox-ACC kill-INTERR-2SG / kill-INTERR-2SG>OBJ,SG
lit. ‘You killed the polar fox which Wera found when?’

b. [[Wera-h] t'en'ana xo-wi°] noxa-m] [xada-d°m / *xada-w°
Wera-GEN yesterday find-FF.PTCP polar.fox-ACC kill-1SG / kill-1SG>OBJ,SG

I killed the polar fox which Wera found YESTERDAY.’

(20) only in relative clauses

a. subject

Wera-ONLY-GEN find-FF.PTCP reindeer-ACC kill.3SG(*>SG.OBJ)

‘He killed the reindeer that only WERA found.’

b. adjunct

[Wera-h pedara-r'i-x'nu xada-wi°] ti-m maneqqa-d°m / *maneqqa-w°
Wera-GEN forest-ONLY-LOC kill-FF.PTCP reindeer-ACC see-1SG / see-1SG>SG.OBJ

‘I saw the reindeer which Wera killed only in the forest.’

• In TY, if the relative clause with focus modifies the intransitive subject (S), it is marked as focus and the verb bears SFOC agreement.

(21) [kin pa:j-o:l o:-k] o:riña:-nu-l?
who beat-STAT.AN child-FOC weep-IMPF-SFOC(3SG)

‘The child beaten by whom is crying?’
If the relative clause modifies the transitive subject (A), there is no agreement or focus marking.

(22) sespa-la [qadunudəŋ kewej-lgal’d’s] köde-Ø jopotej-Ø?
door-ACC whither leave-EV-IMPF.PTCP person-Ø open-Ø
lit. ‘The man who went where opened the door?’

Focus in the relative clause that modifies the object of the main verb requires focus marking on that object and object-focus agreement on the verb.

who sing-IMPF-AN song-FOC hear-FOC.1/2SG father sing-IMPF-AN song-FOC hear-FOC.1/2SG
lit. ‘The song that who was singing did I hear? You heard the song that FATHER was singing.’

b. *[kin jaqta-nu-l] jaqta-γana mōri-mak?
who sing-IMPF-AN song-ACC hear-NEUTFOC.2SG

Questioning out of the relative clause that modifies the oblique element requires neutral focus agreement on the verb with no special focus marking on the oblique.

(24) [kin pa:j-o:][1] rukun ṉol-k?
who hit-STAT.AN thing be-NEUTFOC.INTERR.2SG
‘You are a person hit by whom?’

Questioning out of an adverbial clause requires neutral focus agreement on the verb.

(25) [kin kelu-da-γa] tet kewej-k?
who come-3-DS.CVBS you leave-NEUTFOC.INTERR.2SG
‘After whose arrival did you leave?’ [=after who arrived did you leave]

So it is not the syntactic role of the focused element within the island clause that affects the patterns of agreement and focus marking in the main clause in TY, but the syntactic role of its head. The noun modified by a relative clause or the dependent verb form in the adverbial clause are morphosyntactically treated as focussed elements (for details see Matić 2014).

In both languages some environments (past tense in TN and NEUTFOC in TY) require the interrogative form of the verb in questions, independently on whether the wh-word is located in the main or embedded clause.

For TN cf. (18a) and (19a) above and (19a’).

(19a’) *[xib’a-h xada-wi’s] ti-m maneqqα-nu-s°?
who-GEN kill-PF.PTCP reindeer-ACC see-2SG-PAST
(‘You saw the reindeer killed by whom?’)

For TY cf. (24) and (25) above and (25’).

(25’) *[kin kelu-da-γa] tet kewećsk?
who come-3-DS.CVBS you leave-NEUTFOC.2SG
(‘After whose arrival did you leave?’ [=after who arrived did you leave])

In sum: the focus feature responsible for the marking of the phrase as focussed and for the patterns of agreement it triggers on the verb must be associated with the head of that phrase in both languages in question, even though the semantic operation of focussing appears to target one of its non-head daughters.

4. Focus percolation

Based on the morphosyntactic evidence presented in the previous section, we propose that

- the grammar of TN and TY has to refer to the feature [FOC], whose value is some semantic expression corresponding to the semantics of the focussed word; [WH] is a subtype of [FOC]; wh-words are specified both for [FOC] and [WH]
- the feature [FOC] has to be associated with the clause-level maximal projection
- syntactically this is achieved by the percolation mechanism which targets [FOC]
- the semantic effect of percolation if the creation of a complex focus structure

The mechanism of focus percolation superficially resembles the standard theory of focus projection that accounts for the placement of focal accents in English with its two basic principles (Selkirk 1995):

F-marking of an internal argument of a head licences the F-marking of the head.
F-marking of the head licences F-marking of the phrase.
• On that view only heads and arguments can project focus. However, we are not aware of any structural restrictions which would permit the focus feature to be transmitted to the maximal projection from certain positions only, so the mechanism has to be freer for TN and TY: any non-head subconstituent of the phrase carrying [FOC] can pass it to the head, cf. Bürings’s (2006) ‘Unrestricted Vertical Focus Projection’. This results in the head being focus-marked.

[FOC] on a non-head daughter licenses [FOC] on the head
[FOC] of the head licences [FOC] on the phrase.

The way this works is shown below for simple NPs and for relative clauses (TY):

(17) [joqon nime-k] oyo:la:-1.
Yakut house-FOC stand-FOC(3SG)
‘A YAKUT house is standing (there).’

1 [[[joqonFOC][nimek]] oyo:la:1 →
2 [[[joqonFOC][nimekFOC]] oyo:la:1 →
3 [[[joqonFOC][nimekFOC]] FOCC oyo:la:1

(23a) [([kin jaqta:-nu-1] jaqta-k] mūrī:-mang?
who sing-IMP-AN song-FOC hear-FOC:1/2SG
lit. ‘The song that who was singing did I hear?’

1 [[[kinFOC][jaqta:nuFOC]] jaqta:k] mūrīmang? →
2 [[[kinFOC][jaqta:nuFOC]] jaqta:k] mūrīmang? →
3 [[[kinFOC][jaqta:nuFOC]] jaqta:kFOC] mūrīmang? →
4 [[[kinFOC][jaqta:nuFOC]] jaqta:kFOC] mūrīmang?

• Another important difference is semantic. Whereas the focus projection mechanism was originally intended to account for broad focus structures, the focus percolation in TN and TY creates what Krifka (1991) refers to as ‘complex focus’ in which both the head of the phrase/clause and the original carrier of focus are foci, i.e. the expressions whose denotations have alternatives in the context.

• These two foci are not interpreted independently, but rather as a pairwise list, such that the focus background is applicable to this list, but not to other alternative lists (26). The way alternatives are computed with lists is represented in (27).

(26) For a pair x,y, such that P(x•y), it is true that R(x)
where x = head of a phrase, y = focused word within the phrase, • = list operator
P = λxλy.phrase’, R = λx.(matrix) clause’

(27) [x] = R(x) & P(x•y)
[[x]] = R(x) & P(x•y)–C & C ⊆ Q
[[x]] = \{R(a) & P(a•b), R(a) & P(a•c), R(a) & P(a•d)
R(i) & P(i•c), R(i) & P(i•d)
R(m) & P(m•b), R(m) & P(m•c), R(m) & P(m•d)\}

• The semantics for (19b) (abstracting from time, deixis, reference, etc.):

(19b) [[Wera-h t’en’anə xo-wi’]] noxa-m] xadaa-d’m
Wera-GEN yesterday find-PP:PTCP polar.fox-ACC kill-1SG
lit. ‘I killed the polar fox which Wera found yesterday’

(19b’) For the pair (polar fox, yesterday), such that it is true that Wera found polar fox yesterday, it is true that I killed the polar fox.

(19b’’) [x] = kill’(me, fox) & find’(Wera, fox•yesterday)
[[x]] = kill’(me, x) & find’(Wera, x•y)–C & C ⊆ Q
[[x]] = \{kill’(me, fox) & find’(Wera, fox•today), kill’(me,fox) & find’(Wera, fox•yesterday), kill’(me,fox) & find’(Wera, fox•last year)... kill’(me, bird) & find’(Wera, bird•today), kill’(me,bird) & find’(Wera, bird•yesterday), kill’(me,bird) & find’(Wera, bird•last year),
kill’(me, elk) & find’(Wera, elk•today), kill’(me,elk) & find’(Wera, elk•yesterday), kill’(me,elk) & find’(Wera, elk•last year)\}

• Question islands are a special case of this more general semantic operation. The head noun to denote a set of entities defined in terms of the properties specified in the wh-word.

(28) For which pair x,y, such that P(x•y), does it hold true that R(x)
where x = head of the question island, y = question word,
P = λxλy.island clause’, R = λx. matrix clause’

• For instance, in (18a) the question word ‘who’ denotes a set of men who kill reindeer and the question ranges over the set of reindeer who have the property of having been killed by these men and are defined in terms of this property.
(18a) [xib’a-h xada-wi’] ti-m mane-ca-n°?

who GEN kill-PF,PTCP reindeer-ACC see-INTERR-2SG

‘You saw the reindeer killed by whom?’

(18a’) For which pair (reindeer, person), such that it is true that person killed the reindeer, is it true that you saw the reindeer?

(18a’’) \[[x] \rightleftharpoons \begin{align*} & \text{see } \text{(you, reindeer) & kill’ } (\text{person•reindeer)}) \\
& \text{\textbf{x}} \rightleftharpoons \text{ \textbf{x}} X \text{ & kill’ } (\text{Petya•reindeer1}, \text{see’ } (\text{you, reindeer1}) & \text{kill’ } (\text{Misha•reindeer1}), \text{see’ } (\text{you, reindeer1}) & \text{kill’ } (\text{Vasya•reindeer1})... \\
& \text{\textbf{x}} \rightleftharpoons \text{ \textbf{x}} X \text{ & kill’ } (\text{Petya•reindeer2}, \text{see’ } (\text{you, reindeer2}) & \text{kill’ } (\text{Misha•reindeer2}), \text{see’ } (\text{you, reindeer2}) & \text{kill’ } (\text{Vasya•reindeer2})... \\
& \text{\textbf{x}} \rightleftharpoons \text{ \textbf{x}} X \text{ & kill’ } (\text{Petya•reindeer3}, \text{see’ } (\text{you, reindeer3}) & \text{kill’ } (\text{Misha•reindeer3}), \text{see’ } (\text{you, reindeer3}) & \text{kill’ } (\text{Vasya•reindeer3})... \\
& \end{align*}

This creates the broadening of the object of inquiry formally expressed as the broadening of question focus (cf. Nishigauchi 1990). Like in Japanese and a number of other languages, question islands inquire about the identity of the whole island, making a crucial use of the identity of the element represented by the question word: this is due to the list-reading induced by complex focus.

(29) a. Wera-h xada-wi’ ti-m
Wera-GEN kill-PF,PTCP reindeer-ACC
‘the reindeer killed by Wera.’

b. ‘/’ Wera-h (xada-wi’-m)
Wera-GEN kill-PF,PTCP-ACC
‘(killed) by Wera.’

TN provides an additional indication that focus within island clauses triggers complex focus interpretation, forming a pairwise list with the head. It comes from the semantics of only in relative clauses. The suffix -/i- ‘only’ can take different scopes within a relative clause, but the head noun always has to have the [soc] feature irrespective of the scope of only, as follows from agreement on the main verb. The important point is that different scopes of only in different focus readings, as indicated in translations and shown below.

(30) [Wera-’ri-h] loc pedara-xana xada-wi’] ti-m maneŋŋa-d’m/ *mameŋŋa-w°
Wera-ONLY-GEN forest-LOC kill-PF,PTCP reindeer-ACC see-1SG / see-1SG>SG.OBJ
‘I saw the reindeer which only Wera killed in the forest (and not anybody else).’

(30’’) For the pair (reindeer, Wera), such that it is true that Wera (and no-one else) killed the reindeer in the forest, it is true that I saw the reindeer.

(30’’) \[[x] \rightleftharpoons \begin{align*} & \text{see’ } (\text{me, reindeer) & kill’ } (\text{Wera•reindeer, in.forest}) \\
& \text{\textbf{x}} \rightleftharpoons \text{ \textbf{x}} X \text{ & kill’ } (\text{\(x\cdot y\)} \text{, \text{in.forest}) \Rightarrow x=Wera})-\text{C} & \text{C} \subseteq Q \\
& \end{align*}

(31) [Pedara-’ri-xana loc xada-wi’] ti-m maneŋŋa-d’m/ *mameŋŋa-w°
Wera-GEN forest-ONLY-LOC kill-PF,PTCP reindeer-ACC see-1SG / see-1SG>SG.OBJ
‘I saw the reindeer which Wera killed only in the forest (and not anywhere else).’

(31’) For the pair (reindeer, forest), such that it is true that Wera killed the reindeer in the forest (and not anywhere else), it is true that I saw the reindeer.

(31’’) \[[x] \rightleftharpoons \begin{align*} & \text{see’ } (\text{me, reindeer) & kill’ } (\text{Wera, reindeer•in.forest}) \\
& \text{\textbf{x}} \rightleftharpoons \text{ \textbf{x}} X \text{ & kill’ } (\text{\(x\cdot y\)} \text{, \text{in.forest}) \Rightarrow y=\text{in.forest})-\text{C} & \text{C} \subseteq Q \\
& \end{align*}

These data appear to challenge the view that the target of focus is an overt or covert operator that either adjoins to the whole phrase or takes it as its complement, e.g. a (question)-particle (e.g. Cable 2007, 2010ab; Coon 2009) or some kind of Exhaustivity Operator (Horvath 2007). This analysis creates the effect of the whole phrase/clause being available for focusing and eliminates the mechanism of feature percolation from the grammar altogether.

However, it is not immediately clear how it can account for the difference between (30) and (31): while the focus operator is accessible to the larger clause, the word within the scope of only remains inside the island and does not have any bearing on grammaticality and the overall semantics because none of its features are targeted.

In contrast, in our analysis the focusing of a non-head subconstituent and the percolation of the focus feature to the head results in the formation of a pairwise list, in which the head denotes a set of entities defined in terms of the properties specified in the focus phrase, so both the head of the phrase and its subconstituent are focused.
References


Abbreviations

ABL – ablative; ACC – accusative; AFOC – agent focus; AN – action nominaliser; COM – comitative; CVB – converb; DAT – dative; DS – different subject; GEN – genitive; FOC – focus; IMPF – imperfective; INTR – interrogative; INTR – intransitive; LOC – locative; NEUTFOC – neutral focus; OBJ – object; OFOC – object focus; PAST – past tense; PF – perfective; PL – plural; PTCP – participle; SFOC – subject focus; SG – singular; SS – same subject; TR – transitive