1 Introduction

• This paper examines two quantifier particles from the Turkic language Sakha:¹ (I) da(ghany) and (II) emie (§A.1 on romanization, §A.2 on alternation)

(I) da(ghany) [daɾa니] ∼ da [da]
  a. NPIs
    (i) kim da(ghany) who da
        ‘anyone’
    (ii) biir da kinege
         one da book
        ‘any book(s)’
  b. Scalar additive focus
    (i) X da(ghany)
        ‘even X’
    (ii) p da(ghany) q
        ‘even though p, q’
    (iii) elbex da kihi
         many da person
        ‘SO many people’
  c. Coordination
    (i) X da(ghany) ... Y da(ghany)
        ‘both X and Y’
    (ii) NEG < [X da(ghany) ... Y da(ghany)]
        ‘neither X nor Y’

(II) emie [ɛmie] ∼ eme [ɛme] ∼ emit [ɛmit]
  a. Non-specific (epistemic) indefinites
    (i) kim eme/emit who emie
        ‘someone’, ‘some guy’
    (ii) biir eme yrya-ny
         one emie song-ACC
        ‘some song / any song’
  b. Additive focus
    (i) X emie
        ‘Also X’, ‘X, too’
    (ii) NEG < [X emie]
        ‘not X, either’
    (iii) X emie
        ‘again X’, ‘X, again’

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¹Sakha (ISO: sah), occasionally romanized as <Saxa>, is often referred to by its Russian exonym Yakut. Sakha is spoken by around 450,000 native speakers, mainly in the Sakha Republic in the far east of Russia. Along with Dolgan, it belongs to the Northern Siberian sub-branch of Turkic (Johanson 1998).
There is very little (accessible) work on Sakha quantifier particles:

- Present data from elicitations with a native Sakha speaker (Vilyuy dialect), conducted in person (Cambridge, Massachusetts) & online from 2019–2021, supplemented with entries from the online Sakha dictionary sakhatyla.ru, forum posts (forum.ykt.ru), news sites (e.g., kyym.ru), and translations of the bible (ibtrussia.org), checked with consultant.
- As has been shown in much work on particle-based indefinites, typologically common to build NPIs out of a low-scalar existential host (e.g., a WH-word, a numeral meaning ‘one’, and/or a plain some) in concert with an even/also particle.
  - E.g., Japanese -mo (1) and Hindi/Urdu bhii (2). 3

(1) **Japanese -mo**
  a. Focus: Additive ~ scalar additive
     (i) [sono syoonin-mo] damatteita
        that witness-mo was silent
        (scalar reading): ‘Even THAT WITNESS was silent’
        (additive reading): ‘THAT WITNESS was silent, also/too’  (Shimoyama 2006: 145)
  b. **NPIs**
     (i) Yoko-ga [gakusei-o dare-mo] syootaisi-*(nakat)-ta
        Yoko-NOM student-ACC who-mo invite-(NEG)-PST
        ‘Yoko didn’t invite any student’  (Shimoyama 2011: 416)
     (ii) [hito-ri-mo] {ko-na-katta / *ki-ta}
        one-CL-mo {come-NEG-PST / come-PST}
        ‘Not even one person came.’  (Nakanishi 2006: 150)

(2) **Hindi/Urdu bhii**
  a. Focus: Additive ~ scalar additive
     (i) Main-ne [kitaab bhii] padhee
        1SG-ERG book bhii read.PST
        (scalar reading): ‘I even read THE BOOK’
        (additive reading): ‘I also read THE BOOK’

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3 **Glossing key:** Particles are left untranslated in glosses. 1SG, 2SG, etc.=person agreement, ACC=accusative case, AOR=aorist/non-past (“Aorist” following Turkological convention), AUX=auxiliary, CMPR=comparative case, COND=conditional mood, CVB=converb, DAT=dative case, ERG=ergative case, FUT=future, HAVE=derivational suffix indication possession of noun, INDIR=indirective, NEG=negation, POSS=possessor agreement, PST=past, PTPL=participle, Q=question particle or clitic.
This paper focuses on two potentially typologically unique details about Sakha that are puzzles for a theory of quantifier-particle-based NPIs.

Puzzle 1: Sakha NPIs are not emphatic (§2).

- WH-da(ghany) (3) and biir da (4a) NPIs are judged to be pragmatically quite weak, unemphatic.

(3) Min [tugu da(ghany)] aax-*(pa)-t-ym
    I what.ACC da read-(NEG)-PST-1SG
    a. ‘I didn’t read anything’
    b. ‘I didn’t read ANYTHING’

- In contrast Japanese and Hindi/Urdu even-one (1b-ii), (2b-ii), Sakha one-based NPIs lack an ‘even one’ reading (4a-ii)
- biir da’s emphasis is judged as similar to bare noun under negation (4b) (though biir da is slightly less tolerant of marginal exceptions).
- In fact, biir ‘one’ WITHOUT da yields the ‘even one’ reading (4c):

(4) a. Min [biir da kinige] aax-*(pa)-t-ym
    I one da book read-(NEG)-PST-1SG
    (i) ‘I didn’t read any books’
    (ii) ‘I didn’t read even one book / a single book’
    b. Min [kinige] aaxpatym
    ‘I didn’t read books’ / ‘I didn’t read any books’ / ‘I didn’t do any book-reading’
    c. Min [biir kinige] aaxpatym
    ‘I didn’t read even one book / a single book / ONE BOOK’

- (4a), (4c) is surprising—focused hosts (e.g. bare nouns), da(ghany) yields an emphatic, counter-expectational reading, similar to Japanese -mo (1a), Hindi/Urdu bhii (2a)!

(5) Min [kinige da(ghany)] aax-???(pa)-t-ym
    I book da read-(NEG)-PST-1SG
    ‘I (didn’t) even read BOOKS / A BOOK’
    (scalar presupposition): ‘I was very unlikely to have (not) read books / a book’

- Unexpected on exhaustification-based theories of NPIs (Chierchia 2013, Mitrović 2021). Chierchia analyzes even-particle-based NPIs (dubbed even-one, even-WH, or even-some) as INHERENTLY EMPHATIC, exhaustified with E(ven), similar to Minimizer NPIs (e.g., English give a damn, lift a finger).
- As I will show in §2.4.1, the emphatic scalar presupposition cannot be suspended in Hindi.
• Sakha *biir da* presents a challenge. *Biir* ‘one’ is a numeral, so we must exhaustify NPIs constructed with it with E(ven), following Chierchia’s (2013: 153) economy principle OPTIMAL FIT.

(6) OPTIMAL FIT (INFORMAL): If a proposition has active alternatives, exhaustify it first with O(nly).\(^4\)
If this produces a trivial result (a contradiction or the same thing as what you started with) AND you have a salient probability metric, try E(ven)
A probability metric is salient if (6a) and/or (6b) is satisfied:
  a. There is a pragmatically/contextually salient ranking to the alternatives
  b. The alternatives are totally ordered by an entailment relationship

• O-exhaustification of *biir da* ‘any’ (4a-i) will yield a vacuously true statement regardless of polarity. Because the alternatives of *one* \{1, 2, 3, ...\} are totally ordered \{1⇐2⇐3,...\}, (6b) says proceed with E(ven). Return an interpretable LF only if alternative-bearing element scopes below a downward-entailing operator.

Proposed Solution to Puzzle 1: (slightly?) relax assumptions about OPTIMAL FIT (6), the connection between E-exhaustification and emphasis.

• E-exhaustification correlates with pragmatic emphasis if condition (6a) is met.
• Meeting condition (6b) alone does produce emphasis.

(7) Proposed categorization of emphatic/unemphatic NPIs (’σ’=scale)

<table>
<thead>
<tr>
<th>language</th>
<th>item</th>
<th>(6a) pragm. σ?</th>
<th>(6b) rich σ?</th>
<th>Reading under NEG</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Eng</td>
<td><em>any</em> N_{PL,MASS}</td>
<td>X</td>
<td>X</td>
<td>Potentially Emphatic NPI</td>
</tr>
<tr>
<td>b. Sah</td>
<td>(i) bare N</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(ii) <em>biir da</em></td>
<td>X</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(iii) <em>biir</em> N</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>c. Jpn</td>
<td><em>hito..-mo</em></td>
<td>✓</td>
<td>✓</td>
<td>Inherently Emphatic NPI</td>
</tr>
<tr>
<td>d. Hin/Urd</td>
<td><em>ek bhii</em></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Puzzle 2: *da(ghany)* lacks a basic additive also/too reading (§3)

• Unlike Japanese *-mo* (1a-i) and Hindi *bhii* (2a), Sakha *da(ghany)* combined with a focused host never produces a plain additive also/too reading. Instead, *emie* is used, in both positive and negative sentences:

(8) a. Studjen [kinige-ni {emie / #*da(ghany)*}] aax-ta
   student book-ACC {emie / *da*} book-PST
   ‘The student also read THE BOOK’, ‘The student read THE BOOK, too/also’
   (additive presupposition): The student read something other than the book

  b. Studjen [kinige-ni {emie / #*da(ghany)*}] aax-pa-ta
   student book-ACC {emie / *da*} read-NEG-PST
   ‘The student didn’t read THE BOOK, either’
   (additive presupposition): In addition to not reading the book, the student also failed to read something else

• With *da(ghany)* the sentences in (8) would have a scalar *even*-like reading.
• At the same time, *even*-like readings typically bear an additive presupposition (Abrusán 2014, 2016, Szabolcsi 2017). This is true in Sakha, as well as English:\(^5\)

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\(^4\)The exhaustifier O(nly) is equivalent to EXH used in much other work (e.g., Chierchia et al. 2012, Fox 2007).

\(^5\)Note that the positive counterpart of (9) absent of negation is marginal without *onnooghor* ‘even, especially’, while the negative does not require it. Further, *da(ghany)* is not required here: *onnooghor* *studjen isi kinigeni aax(pa)ta* ‘even THE STUDENT read / did not read that book’.

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(9) Onnooghor [studjen da(ghany)] iti kinige-ni aax-(pa)-ta
   even student da that book-ACC read-(NEG)-PST
   ‘Even THE STUDENT read / did not read that book’
   a. (Scalar presupposition): It is very unlikely that this particular student would / would not read that book
   b. (Additive presupposition): In addition to the student, there is somebody else who did read / did not read that book

• I explore a blocking account of this pattern.

2 Sakha NPIs and emphasis

2.1 Exhaustification approaches to NPIs

• I adopt an exhaustification-based, alternative-semantics view of polarity items, largely following Chierchia’s (2013) theory and formalism.6

(10) Ingredients of an NPI
   a. NPIs are low-point existentials with obligatorily active semantic alternatives
   b. The alternative-enriched LF of sentence containing an NPI are interpreted by a covert exhaustifier:
      (i) O(nly)= covert only
      (ii) E(ven)= covert even
   c. Because the alternatives are obligatory (i.e. grammatical), they cannot be pruned by Gricean Relevance.
      (i) exhaustification may produce uninterpretable LFs (=ungrammatical)
      (ii) Typically, obligatory ALTs will only be interpretable in the scope of a downward monotone operator (e.g., negation)

• In some sense, quantifier particles like da(ghany) CREATE polarity-sensitive elements:

(11) Sakha interrogatives without da(ghany) are plain interrogatives:
   a. Djulus [tugu ] aax-(pa)-ta*(?)
      Djulus [what.ACC ] read-(NEG)-PST
      ‘What did Djulus (not) read?’
   b. Djulus [tugu da(ghany)] aax-* (pa)-ta
      Djulus [what.ACC da(ghany)] read-(NEG)-PST
      ‘Djulus didn’t read anything’

(12) Hungarian: vala-words are PPIs without particle is
   a. *(Nem) hiszem, hogy [vala-ki is] el jön
      (NEG) believe.1SG that [some-who is] VB.PTCL come.3SG
      ‘I didn’t think that anyone will come’
   b. (*Nem) hiszem, hogy [vala-ki ] el jön
      (NEG) believe.1SG that [some-who ] VB.PTCL come.3SG
      ‘I think that someone will come’  
      (Halm 2016: 144)

• One function of quantifier particles like Sah. da(ghany), Jpn. -mo, Hin./Urd. bhii is to activate the alternatives of their host (=make them obligatory), as I have explored in other work (2020, 2021a, 2021b. See Szabolcsi 2017, Mitrović 2021 for similar claims)

• da(ghany)+low-point existential= NPI

• Definition of O(nly)-exhaustifier:

\[ [O_{\text{ALT}}(\phi)] = \phi \land \forall \psi \in \text{ALT}[\psi \rightarrow \phi \subseteq \psi] \]

where ‘\( \subseteq \)’ means ‘entails’

a. O(nly) asserts a proposition with alternatives \( \phi \) and negates all the alternatives of \( \phi \) which \( \phi \) does not entail.

### 2.1.1 Exhaustification of WH+da(ghany)

<table>
<thead>
<tr>
<th>WH+da(ghany), positive</th>
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<tbody>
<tr>
<td>(14) *Djulus kim-i da(ghany) kör-d-üm</td>
</tr>
<tr>
<td>Djulus who-ACC da(-body) see-PST-1SG</td>
</tr>
<tr>
<td>*Djulus saw anybody’</td>
</tr>
<tr>
<td>(15) Some definitions.</td>
</tr>
<tr>
<td>a. ([\text{kim}] = [\text{who/-body}] = \lambda P(e,t) \cdot \exists x[\text{PERSON}(x) \land P(x)])</td>
</tr>
<tr>
<td>b. ([\text{kim da(ghany)}] = [\text{anybody}] = \lambda P(e,t) \cdot \exists x[\text{PERSON}(x) \land P(x)]_{[+\text{ALT}]})</td>
</tr>
<tr>
<td>c. ([14]) = \exists x[\text{PERSON}(x) \land \text{SEE}(\text{djulus}, x)]_{[+\text{ALT}]})</td>
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• Assume there are three entities in the Domain of individuals: \{djulus, tujara\}. (15c) is thus the same as \((p \lor q)\), where \(p = \text{’Djulus saw himself’} \) and \(q = \text{’Djulus saw Tujara’} \). The set of alternatives for \((p \lor q)\) is (16):

\[ \text{ALT}(p \lor q) = \{p \lor q, p, q, p \land q\} \]

a. Entailed–ALTS of \((p \lor q)\) = \{p \lor q\}

• Because (15c) has active alternatives, we exhaustify the prejacent \((p \lor q)\) w.r.t. the alternatives in (16):

\[ O_{\text{ALT}}(p \lor q) = \{p \lor q, \neg p, \neg q, \neg(p \land q)\} \]

a. \((p \lor q) \land \neg p \land \neg q \land \neg(p \land q)\)

b. \((p \lor q) \land \neg(p \lor q) \land \neg(p \land q)\)

\[ \bot \]

• The result of O-exhaustification (17b) contradicts the prejacent \((p \lor q)\). Uninterpretable (thus ungrammatical).
WH+da(ghany), negative

(18) Djulus kim-i da(ghany) kör-bö-t-üm
Djulus who-ACC da(ghany) see-NEG-PST-1SG
‘Djulus didn’t see anybody’

(19) a. [kim] = [who/-body] = λP_e,t. ∃x[PERSON(x) ∧ P(x)]
  b. [kim da(ghany)] = [anybody] = λP_e,t. ∃x[PERSON(x) ∧ P(x) ]_{+ALT}

• Where D_e = {djulus, tujara}, (19c)= ¬(p ∨ q), where p = ‘Djulus didn’t see himself’, q = ‘Djulus didn’t see Tujara’. This yields the set of ALTs in (20).

(20) ALT(¬(p ∨ q)) = {¬(p ∨ q), ¬p, ¬q, ¬(p ∧ q)}
  a. Entailed–ALTs of ¬(p ∨ q) = {¬(p ∨ q), ¬p, ¬q, ¬(p ∧ q)}

• All of the alternatives in (20) are entailed by the prejacent ¬(p ∨ q). O-exhaustification will simply return the prejacent and all of its negated alternatives:

(21) O_{ALT}(¬(p ∨ q)) = {¬(p ∨ q), ¬p, ¬q, ¬(p ∧ q)}
  a. = ¬(p ∨ q) ∧ ¬p ∧ ¬q ∧ ¬(p ∧ q)

2.2 One problem: Numerical-based NPIs

• Chierchia’s theory relies on an economy constraint called OPTIMAL Fit to mitigate whether alternatives are to be interpreted by the O-exhaustifier (13) or E-even (defined shortly).

(22) OPTIMAL Fit: In exhaustifying φ, use O unless O(φ) is trivial (=contradictory or vacuous) and there is a salient probability metric μ.

A probability metric μ is salient iff one of the following holds:
  a. μ is salient in the context
  b. ALT is totally ordered by ‘⊆’
  (Chierchia 2013: 153)

• Condition (22a) satisfied if contextually, there is a probability ranking of the alternatives (which are ranked along a likelihood scale).

• Condition (6b) if the alternative-bearing element has a richly ordered scale (i.e., belong to the scale of numeral scale, rather than a reduced scale like non-numeral based NPIs < ∃, ∀ >≡ < ∨, ∧ >)

• OPTIMAL Fit stipulates that if these conditions are met, exhaustification with E(ven) proceeds

(23) [E_{ALT(φ)}] = φ ∧ ∀ψ ∈ ALT[φ <_µ ψ]

Where ‘φ <_µ ψ’ says that φ is less likely than ψ with respect to a contextually relevant probability metric μ.
  a. E(ven) asserts a proposition φ with alternatives ALT(φ) and returns an interpretable LF if and only if φ is less likely than any member of ALT(φ) (aside from those which φ entails, i.e. a

7Among other reasons, OPTIMAL Fit is partly postulated as a means for which a polarity-sensitive item can be simultaneously an NPI and a free-choice item (e.g. English any). Free-choice effects are explained by recursive exhaustification with O (Chierchia 2013: chs. 4, 5. See also Chierchia et al. 2012, Fox 2007, Fox and Katzir 2011 on deriving the free-choice effect via recursive exhaustification with O(nly)). Rather than stipulating that an item has a definition that includes something like “I want O(nly)” or “I want E(ven)”, OPTIMAL Fit allows the grammar to decide automatically, based on the nature of the alternatives. See Mitrović (2021: 144) for a recent revision of Optimal Fit that adds a second round of O-exhaustification before checking for a salient probability metric.
proposition cannot be less likely than itself).

- Considering biir da NPIs, even without OPTIMAL Fit, to explain the NPI effect, we need to use E(ven) if biir ‘one’ is truly a numeral.
- In positive sentences like (24), the most salient reading of biir is essentially the same as English ‘one’, where it would be infelicitous if it meant more than one.

(24)  

| a.  | Kini biir yt-taax  ebit 3SG one dog-HAVE INDIR  ‘He had one dog’ |
| b.  | Min biir kinige aax-t-ym I one book read-PST-1SG  ‘I read one book’ |

- Indefinite a/an-like readings occur with bare noun. Further, like many Turkic languages, Sakha is a GENERAL NUMBER language: morphologically singular nouns can have a singular or plural indefinite reading (25a), and further nouns modified by numerals are ungrammatical with plural marking on the noun (25b).

(25)  

| a.  | Min ynav atyylax-pyt-ym I cow buy-PST-1SG  ‘I bought a cow’ |
| b.  | Min ikki yt-(*tar)-ym my two dog-(PL)-1SG  ‘My two dogs’ |
| i.  | ‘I bought (some) cows’ |
| ii. | ‘I bought (some) cows’ |
| c.  | Min yt-tar-ym  ‘my dogs’ |

- Thus, we can give a denotation for biir ‘one’ as a cardinality predicate:

(26)  

\[
\text{[biir]} = [\text{one}] = \lambda P_{\langle e,t \rangle} \cdot Q_{\langle e,t \rangle} \cdot \exists x [P(x) \land Q(x) : |n| = 1]
\]

2.2.1 Exhaustication of biir da NPIs

<table>
<thead>
<tr>
<th>biir da NPIs, positive sentence</th>
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(27)  

*Djulus biir da kinige aax-ta
Djulus one da book read-PST
*’Djulus read any book’

(28)  

<table>
<thead>
<tr>
<th>Some definitions</th>
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<tbody>
<tr>
<td>a.</td>
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<tr>
<td>b.</td>
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<tr>
<td>c.</td>
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<tr>
<td>d.</td>
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</table>

- Because numerals are richly ordered along a scale, the alternatives of (28d) are correspondingly richly ordered. Where ‘one’=‘Djulus read one book’, etc., the following represents our set of alternatives:

(29)  

\[
\text{ALT}((28d)) = \{\text{one, two, three, ...}\}
\]

a.  | Entailed-ALTS of ‘one’= {one} |

- Following OPTIMAL Fit, we begin with O-exhaustification:

(30)  

\[
O_{\text{ALT}}(\text{one}) = \{\text{one} \land \neg\text{two} \land \neg\text{three} \land \neg\text{three} \land ...\}
\]

- The result of (30) is NOT a contradiction; it is a regular Gricean Quantity implicature (i.e., it would produce a reading of ‘Djulus read exactly one book’). At the same time, the truth-conditions of (30) are
identical to the prejacent ‘one’ (28d), because one does not entail any numerals greater than one. That is, this is a vacuous result.

Unlike with the WH+da(ghany) cases above, our alternatives here (28d) are a rich, totally ordered scale. Thus, condition (22b) of OPTIMAL FIT are met, and we proceed to exhaustify with E(ven):

\[
E_{\text{ALT}}(\text{one}) = \text{one} \land \forall \psi \in \text{ALT}[\text{one} \leq_{\mu} \psi],
\]

where \( \text{ALT}(\text{one}) = \langle \text{one}, \text{two}, \text{three}, \ldots, \rangle \)

The result in (31) is unsatisfiable, hence a contradiction. This is because each alternative of biir ‘one’ entails one: you cannot read two books without reading one book, etc. A proposition cannot be less likely than a proposition that entails it (see Crnič 2014).

### biir da NPIs, negative sentence

(32) Djulus biir da kinige aax-pa-ta
    Djulus one da book  read-NEG-PST
    ‘Djulus didn’t read any book(s)’

(33) Definitions same as (28), except [(32)]

\[
[(32)] = \neg \exists x[\text{BOOK}(x) \land \text{READ}(\text{djulus}, x) : \text{lnl} = 1]_{+[\text{ALT}]}
\]

(34) \( \text{ALT}(33) = \{\neg \text{one}, \neg \text{two}, \neg \text{three}, \ldots, \} \)

a. Entailed-\( \text{ALT}s \) of (33) = \( \{\neg \text{one}, \neg \text{two}, \neg \text{three}, \ldots, \} \)

Like with WH+da(ghany), all of the alternatives of a negated existential are entailed ??.

(35) Exhaustification with O(nly)

\( O_{\text{ALT}}(33) = \{\neg \text{one} \land \neg \text{two} \land \neg \text{three} \} \)

Like with positive biir da, the result of O-exhaustification in a negative sentence (35) is vacuous. Again, because the numeral is richly ordered, we move onto E(ven):

(36) Exhaustification with E(ven)

\[
E_{\text{ALT}}(\neg \text{one}) = \neg \text{one} \land \forall \psi \in \text{ALT}[\neg \text{one} \leq_{\mu} \psi]
\]

E-exhaustification of a negated numeral (36) is interpretable, unlike in positive sentences. This is because \( \neg \text{one} \) entails \( \neg \text{two}, \neg \text{three}, \) etc., but not vice-versa.

### 2.3 NPIs and emphasis in general

- All NPIs seem to involve some degree of “emphasis,” though emphasis is a murky notion.
- Kadmon and Landman (1993) characterize the emphatic degree of NPIs in terms of tolerance of marginal exceptions, which is also adopted by Chierchia (2013), Mitrović (2021).
- PI any combining with a plural head nouns ((i) sentences in (37)) feel “stronger” than bare plurals (ii):

(37) a. (i) Djulus will not take classes next semester.
    (ii) Djulus will not take any classes next semester.

b. (i) If Djulus takes classes next semester, he will be sad
    (ii) If Djulus takes any classes next semester, he will be sad

c. (i) Is Djulus taking classes next semester?
    (ii) Is Djulus taking any classes next semester?

d. (i) Djulus would rather do research than teach classes next semester.
    (ii) Djulus would rather do research than teach any classes next semester.
That is, the (i) sentences are more acceptable if followed up with something like well other than the required seminar.

Chierchia (2013) characterizes the effect in (37) as having to do not with probability-ranked alternatives, but rather by the fact that (weak) NPIs like English any have active alternatives. Check each domain for a hit, and (and subdomains of those domains; DOMAIN WIDENING).

BUT, any’s relationship with marginal exceptions is complex; we can induce further emphasis on the already widened domain. When we compare unstressed any with plural nouns to its stressed counterpart AND TO a minimizer like an iota of a class and even one / a single, the latter feel even stronger:

(38) a. (i) Djulus will not take an iota of a class next semester
   (ii) Djulus will not take ANY class / ANY classes next semester
   (iii) Djulus will not take even one class / a single class next semester
b. (i) If Djulus takes an iota of a class next semester, he will be sad
   (ii) If Djulus takes ANY class / ANY classes next semester, he will be sad
   (iii) If Djulus takes even one class / a single class next semester, he will be sad
   (i) Is Djulus taking an iota of a class next semester?
   (ii) Is Djulus taking ANY class / ANY classes next semester?
   (iii) Is Djulus taking even one class / a single class next semester?
   (i) Djulus would rather do research than teach an iota of a class next semester
   (ii) Djulus would rather do research than teach ANY class / ANY classes next semester
   (iii) Djulus would rather do research than teach even one class / single class next semester

Compared to the unstressed any options in (37), the options in (38) are even less tolerant of exceptions. That is, (37) would relatively acceptable if, say, Djulus were given the option of teaching a really low-workload course, but (38) would not.

We can see these “degrees of emphasis” further in Q&A pairs. Unstressed any+plural noun and bare plural nouns are essentially parallel (40a). Unstressed any does not carry a negative bias, and follow-up questions about marginal exceptions (e.g. the required seminar) are perfectly normal.

When any is stressed, it carries more negative bias, and marginal exceptions are less tolerated, unless Speaker B clarifies that they don’t really think of the seminar as a class.

(40) a. Bare Plural/unstressed any with plural
   (i) Speaker A: Is Djulus taking [[classes / any classes]] next semester?
   (ii) Speaker B: No.
   (iii) Speaker A: Not even the required seminar?
   (iv) Speaker B:
       Negative:
       #He is not taking [classes] next semester.
       #He is not taking [any classes] next semester.
       He is not taking [[ANY class / ANY classes]] next semester.
       He is not taking [[ANY class at all / ANY classes at all]] next semester.
       Affirmative:
       Well, other than the seminar, he’s not taking any classes.

b. any+singular / stressed any+plural
   (i) Speaker A: Is Djulus taking [ANY class / ANY classes] next semester?

---
8At least in American English, NPI any typically bears stress with a singular count noun head. In my dialect, stressed any=[éni], unstressed any=[ni]. Free-choice any is typically stressed (and if unmodified, also preferred with singular count nouns).
• In contrast, the same exchange with *even one, a single* in the initial question (41a) changes the picture slightly. While a follow-up to a negative answer is felicitous and parallel stressed *any*, an affirmative that grants that Djulus is taking the seminar (but no other classes) (41a-iv) much stranger than stressed *any* (40b-iv), though changing the domain is still an option.

(41) a. With *even one, a single*
   (i) **Speaker A**: Is Djulus taking [*even one class / a single class*] next semester?
   (ii) **Speaker B**: No.
   (iii) **Speaker A**: Not even the required seminar?
   (iv) **Speaker B**: Negative:
   # He is not taking [classes] next semester.
   # He is not taking [any classes] next semester.
   # He is not taking [ANY class(es)] next semester.
   # He is not taking [ANY class(es) at all] next semester.
   **Affirmative:**
   Well, other than the seminar, he’s not taking any/ANY classes.
   Well, yeah, but that’s not really a class (changing domain of class)

• Questions with minimizer NPIs like *an iota* require negative bias, such that A’s question in (42a) would be infelicitious out of the blue. Rather, there would have to be a discourse-salient reason to think that Djulus is taking no classes. Hence, if answered negatively, it is quite strange to keep pushing the issue (42c)\(^9\)

(42) **Minimizer an iota**
   a. **Speaker A**: Is Djulus taking [an iota of a class] next semester?
   b. **Speaker B**: No.
   c. **Speaker A**: ??Really? Not even the required seminar?

2.4 Emphasis in Sakha NPIs

• Unfortunately, Sakha *da(ghany)*-based NPIs are not licensed in questions (43) (unless the question also contains negation). Instead, interrogatives appear with *emit* (<emie ‘also’) (43a), and carry no negative bias. For an *even one* reading of *biir* ‘one’, an *sataar* ‘even’ is used with *biir*, absent of *da* (43b).

(43) a. {Kim emit / *kim da(ghany)} kofje ih-er=yj?
   who emie l who da coffee drink-AOR=Q
   ‘Does anyone drink coffee?’
   b. (i) Saatar [biir (*da) kinige-nil] aax-pyt-yŋ duo?
   even one da book-ACC read-PST-2SG 1
   ‘Did you read even one book?’
   (ii) *Biir da kinigeni aaxpytyŋ duo?
   int: ‘Did you read even one book?’ / ‘Did you read any book(s)?’

\(^9\)Further, minimizer questions can be answered by negating the presupposition of the question. E.g. **Speaker A**: Is Djulus taking *an iota of a class* next semester? **Speaker B**: Where’d you hear that he’s not taking classes? He’s taking the required seminar!
Nor are they licensed in conditionals, which can also induce a negative bias with minimizers (*If you take an iota of a class...*).

Again, *emie*-based forms instead:

(44)  
\[
\begin{align*}
\text{Tujara } & \left[ \{ \text{tugu emit} / *\text{tugu da(ghany)} \} \right] \text{ojor-doghuna, } & \text{Djulus čaj kut-an} \\
\text{Tujara what.ACC emie} / \text{what.ACC da} & \text{repair-COND.3SG Djulus tea pour-CVB} \\
\text{bier-iexteex} & \text{give-FUT.3SG} \\
\text{‘If Tujara repairs anything, Djulus will serve (her) tea’}
\end{align*}
\]

Thus, accounting for reported “weakness” or lack of emphasis is a bit tricky in Sakha.

### How emphasis was gauged in Sakha

- In addition to asking about the speaker’s impressions of how emphatic/strong statements with *da(ghany)*-NPIs are, I primarily gauged emphasis in two ways. Consider the following series:

(45)  
\[
\begin{align*}
\text{a. Bihigi [balyk] ilimnee-be-bit} & \text{we fish catch-NEG-1PL} \\
\text{b. Bihigi [biir da balyk] ilimnee-be-bit} & \text{we one da fish catch-NEG-1PL} \\
\text{c. Bihigi [biir balyk] ilimnee-be-bit} & \text{We one fish catch-NEG-1PL} \\
\text{‘We didn’t catch fish / any fish / a single fish’}
\end{align*}
\]

(I) Inquiring about tolerance of marginal exceptions when a sentence provided in isolation. E.g. asking for a member of (45), whether it would be acceptable to say in the context that they caught a small fish but threw it back (etc.).

(II) Giving sentences side-by-side, asking which felt “stronger” (and if it felt more tolerant of exceptions)

- **Consistently, neither WH+*da(ghany)* nor *biir da* NPIs rated to be inherently emphatic.**

- Interrogative-based NPIs do require, but are compatible with emphasis. For example, with emphatic intonation on the polarity item, (46) gets an emphatic ‘anything at all’ reading.

(46)  
\[
\begin{align*}
\text{Kini [tugu da] bil-bet} & \text{3SG what.ACC da know-NEG.AOR} \\
\text{a. ‘S/he doesn’t know anything’} \\
\text{b. ‘S/he doesn’t know ANYTHING at all’}
\end{align*}
\]

- **With *oolox* ‘totally, absolutely, at all’:**

(47)  
\[
\begin{align*}
\text{Kini [oolox tugu da] bil-bet} & \text{3SG at.all what.ACC da know-NEG.AOR} \\
\text{‘S/he doesn’t know anything at all’}
\end{align*}
\]

- Information structure movement. Very clear with VP-adverbials:

(48)  
\[
\begin{align*}
\text{a. Djulus türğennik [tugu da(ghany)] sie-be-te} & \text{Djulus quickly what.ACC da eat-NEG-PST} \\
\text{‘Djulus didn’t eat anything quickly’}
\end{align*}
\]
b. Djulus [tugu da(ghany)] türgennik sie-te
   Djulus what.ACC da quickly eat-NEG-PST
   ‘Djulus didn’t eat ANYTHING quickly’

- On the other hand, biir da NPIs seem to disfavor emphatic interpretations. Consistently, plain biir alone was reported to have a stronger, less exception-tolerant option, regardless of position:

(49)  a. Djulus {kinige / biir da kinige / biir kinige} aax-pa-t-ym
  Djulus {book / one da book / one book} read-NEG-PST-1SG
  (i)  biir/da kinige: ‘Djulus didn’t read any book(s)’
  (ii) biir kinige: ‘Djulus didn’t read a SINGLE BOOK’ / ‘Djulus didn’t read EVEN ONE book’
  
  b. {kulaxy / biir da kulaxy / biir kulaxy} miigin ytyr-ba-ta
     bug / one da bug / one bug 1SG.ACC bite-NEG-PST
     (i)  kulaxy:
           ‘The bug didn’t bite me’
           ‘No bug(s) bit me’
     (ii) biir da kulaxy: ‘No bugs bit me’ (lit: ‘any bug(s) didn’t bit me’)
     (iii) biir kulaxy: ‘Not A SINGLE bug bit me’ / ‘Not EVEN ONE bug bit me’

- Nevertheless, biir da was rated as slightly more emphatic than bare nouns. Thus, it seems that the picture in Sakha, compared to English is as follows:

(50)  ┌─────────────┬───────┬─────────────┐
      │ TOLERANCE OF MARGINAL EXCEPTIONS │ DEGREE OF EMPHASIS │
      │ (English) classes > any classes > ANY class(es), even one class a single class an iota of a class │
      │ (Sakha) bare noun > biir da Noun > biir noun │

- This is surprising—When da(ghany)’s host is not biir or an interrogative, it routinely results in an emphatic even-like reading, as well as some NPI effects.

(51)  a. onnooghor studjen [kinige-ni da(ghany)] aax-(pa)-ta
      even student book-ACC da read-(NEG)-PST
      ‘The student (didn’t) even read THE BOOK’
  b. Studjen [kinige-ni da(ghany)] aax-??(pa)-ta
     student [book-ACC da] read-(NEG)-PST
     ‘The student didn’t even read THE BOOK’
  c. Onnooghor [studjen da(ghany)] kinige-ni aax-(pa)-ta
     even student da book-ACC read-(NEG)-PST
     ‘Even THE STUDENT didn’t read the book’
  d. [(Onnooghor) bu da studjen] kinige-ni aax-*(pa)-ta
     (even) this da student book-ACC read-(NEG)-PST
     ‘Even THIS STUDENT didn’t read the book’

(52)  Minimizer reading
  a. keppieke-m da suox
      kopek-1SG.POSS da NEG.COP
‘I don’t have even one penny!’

(53) Intensifying so reading

a. [elbex da kihi] kinige aax-(pa)-ta
   many da person book read-(NEG)-PST
   ‘SO MANY people (didn’t) read the book’ (with negation, regretful: ‘I regret that so few
   people read the book; I expected more’)

b. [elbex kihi] kinige aax-(pa)-ta
   ‘Many people read / didn’t the book’ (neutral)

- The behavior of da(ghany) in (51) seems to suggest that biir inherently has a probability ranked scale.
  So why then does this emphatic effect disappear when the host is biir ‘one’?

2.4.1 Aside on Hindi/Urdu NPIs

Hindi/Urdu bhii

- NPIs formed with Hindi/Urdu bhii carry a negative bias (54), hence Chierchia (2013: ch. 3) considering
  them to be INHERENTLY NEGATIVE.

(54) tumheN {koii bhii kitaab / ek bhii kitaab} pasand aayi kyaa?
     you some bhii book / one bhii book like AUX Q
     ‘Do you like any book?’ (negative answer expected)  (Lahiri 1998: 98)

- Further, bhii-based NPIs that I have examined seem to be extremely intolerant of marginal exceptions.
  Compare the following:

(55) Main kaksha mein gaya, lekin...
    I class inside go but...
    ‘I went into the classroom, but...’

a. (i) ... main-ne [kisee ko] *(nahin) dekh
     1SG-ERG someone.OBL DAT (NEG) see.PST
     ‘... (but) I didn’t see anyone’

b. (ii) ... mainne [kisee ko bhii] *(nahin) dekh
     1SG-ERG see.OBL bhii (NEG) see.PST
     ‘... (but) I didn’t see ANYONE (at all)’ / ‘... (but) I saw absolutely no-one’

b. ... main-ne [ek bhii chhaatr ko] *(nahin) dekh
     1SG-ERG one bhii student DAT (NEG) see.PST
     ‘... (but) I didn’t see EVEN ONE single student’

(Ankana Sakha, p.c.)

- (55) was constructed as a sentence where marginal exceptions could easily be tolerated. E.g. if one
  says I went into the classroom but I didn’t see anyone, it is totally felicitous in a context where you saw
  somebody, just not who you expected to see (e.g., if you a saw a student, but not YOUR student).
- Similarly I went into the classroom, but I didn’t see any students is felicitous if say, uttered by a
  teacher who saw a marginal student (e.g. a student not taking the class for credit).
- In the examples with bhii (55a-ii), (55b), any degree of marginal exception is deemed to be infelicitous.
- Further, with bhii, there is reported to be an expectation that the speaker would see somebody.
  This is the case even with ek bhii (a morphosyntactic parallel to Sakha biir da).

2.5 Proposal: Different Paths to E-Exhaustification

- Revise our assumptions about the scale related to OPTIMAL FIT (rep. from (22)) and the choice of scale.
OPTIMAL FIT: In exhaustifying $\phi$, use $O$ unless $O(\phi)$ is trivial (=contradictory or vacuous) and there is a salient probability metric $\mu$.
A probability metric $\mu$ is salient iff one of the following holds:

- $\mu$ is salient in the context
- ALT is totally ordered by ‘$\subseteq$’

(Chierchia 2013: 153)

- Specifically, I propose that meeting (56b) to the exclusion of (56a) does NOT automatically produce what we call “emphasis”.
- While the original formulation of OPTIMAL FIT presents the ‘totally ordered’ entailment condition (56b) to be on par with pragmatically ranked alternatives (56a), I think it is quite plausible that the semantics of a numeral does not in and of itself entail that we (pragmatically) rank its alternatives in the same way as pragmatic expectations.
- Further, if satisfying (56b) always resulted in emphasis, diachronically losing emphasis would entail losing the ordering of the numeral scale, e.g., for Sakha a change in the status of biir ‘one’ from numeral to indefinite determiner. Does not seem accurate.\(^\text{10}\)
- Rather, EVEN particles like da(ghany) can be bleached, losing their requirement that alternatives are ranked along a scale of pragmatically ranked probability alternatives.
- That is...

- Hindi/Urdu bhii does (at least) two things: it activates the alternatives of its host (as I suggested above for all such quantifier particles) AND it requires that those alternatives be ranked along a salient scale (thus resulting in E-exhaustification AND and emphatic interpretation).
- Sakha da(ghany) only activates its hosts alternatives, not requiring them to be ranked along a pragmatically salient scale. Because biir ‘one’ has a rich scale, it gets exhaustified with E(ven).
- There are two final questions related to this claim:

(I) Why does da(ghany) maintain an emphatic even-like with non-end of scale existentials?

- Proposed answer: da(ghany) isn’t picky about whether the scale is richly ordered, reduced (e.g., for WH-words), or pragmatically ordered. It simply requires alternatives to activate (potentially requiring a scalar alternative in all cases. See §3)

(II) Why is plain biir the most emphatic option?

- The second question is tricky.
- To begin with, considering this purely on informal pragmatics, the opposition we should be considering is not biir da vs. plain biir, but rather biir vs bare noun:

(57) Min kinige aax-pa-t-ym
I book read-NEG-PST-1SG
‘I didn’t read (any) books’

(58) Min biir kinige aax-pa-t-ym
I one book read-NEG-PST-1SG
‘I didn’t read A SINGLE book’

- Recall that Sakha is a GENERAL NUMBER language (25)—Bare nouns are ambiguous between singular and plural reference. If a speaker of such a language is choosing to widen the domain (to exclude exceptions under negation), then why would they choose to utter (58) rather than (57)? An (informal) answer is that biir

\(^{10}\)biir always retains its long vowel biir da [bi:rd]. If biir da were unverbated, we would expect [bicrde]. following Sakha consonant and vowel assimilations. Note though, that Gast and van der Auwera (2013: 133) reports a few examples where da assimilates with the preceding vowel (e.g. kini onnooghor tigr-ga-da ehe-ge-de bulu-nar [3SG even tiger-DAT-da bear-DAT-da hunt-AOR.3SG] ‘He even hunts bears and tigers’, where the da is assimilating in frontness in the right coordinand.
‘one’ would induce a pragmatically salient scale (you expected at least one, but even such a small number doesn’t obtain).

- The emphasis felt is a reflection of the fact that a speaker of (58) specified the cardinality of the domain.
- Correspondingly, if we compare *biir da* (59) to bare nouns under negation (59) as a separate pattern, we can obtain a reasonable explanation.

(59)  Min [biir da kinige] aax-pa-t-ym
      I one da book read-NEG-PST-1SG
      ‘I didn’t read any books’

- By choosing to utter (59) rather than (57), the speaker is specifying diminished tolerance of exceptions to the domain, and
- Crucially, *da* is NOT activating the alternatives of *biir kinige* (58), but rather the alternatives of *biir* itself. In doing so, it doesn’t really care about whether the scale it is creating is salient: all it sees is that *biir* has a scale.

3 Why does *da*(ghany) lack a basic additive reading?

- Something that I have been grappling with for a while is that, unlike similar quantifier particles (e.g., Hindi/Urdu *bhii* see above, Japanese *-mo* see above, Hungarian *is/sem* Szabolcsi 2017, BCS *i* Szabolcsi 2017), Sakha *da*(ghany) is not acceptable as a plain additive *too/also/either* particle.
- Rather, there is another particle *emie* used instead:

(60)  a. Studjen [kinige-ni {emie / #da(ghany)}] aax-ta
       student book-ACC {emie / da} read-PST
       ‘The student also read THE BOOK’, ‘The student read THE BOOK, too/also’

       b. Studjen [kinige-ni {emie / #da(ghany)}] aax-pa-ta
       student book-ACC {emie / da} read-NEG-PST
       ‘The student didn’t read THE BOOK, either’

(61)  a. Djulus kofje is-te. [Min {emie / #da(ghany)}] is-t-im
       Djulus coffee drink-PST I {emie / da} drink-PST-1SG
       ‘Djulus drank coffee. I did, too.’

       b. Djulus kofje is-pe-tegh-e. [Min {emie / #da(ghany)}] is-pe-tegh-im
       Djulus coffee drink-NEG-PST-3SG I {emie / da} drink-NEG-PST-1SG
       ‘Djulus didn’t drink coffee. I didn’t, either’

- Further, *da*(ghany)-based NPIs are licensed only in (a subset of) ANTI-ADDITIVE licensors, e.g. negation and clausal comparatives (following Hoeksema 1983 on clausal comparatives), hence they are Strict NPIs (Gajewski 2011).

(62)  a. Licensing under negation

       (i)  Min [tugu da(ghany)] aax-*(pa)-t-ym
            I what.ACC da read-(NEG)-PST-1SG
            ‘I didn’t read anything’

       (ii) Min [biir da kinige] aax-*(pa)-t-ym
            I one da book read-(NEG)-PST-1SG
            ‘I didn’t read any book(s)’

       b. Licensing in comparatives

       (i)  En [kim-neegher da(ghany)] öjdöö-xön
            You who-CMPR da smart-2SG

---

11This section is very much a work in progress, so feedback would be appreciated.
‘You are smarter than anyone’

c. Anti-licensed in conditionals:
(i) Tujara [{tugu emit / *tugu da(ghany)}] ojo-r-doghuna, Djulus čaj kut-an Tujara what.ACC emit / what.ACC da repair-COND.3SG Djulus tea pour-CVB bier-iexteex give-FUT.3SG
‘If Tujara repairs anything, Djulus will serve (her) tea’

d. Anti-licensed in polar questions:
(i) {Kim emit / *kim da(ghany)} kofje ih-er-yj?
who emit / who da coffee drink-AOR=Q
‘Does anyone drink coffee?’

- Identifying the source of additive presuppositions is particularly challenging. For particles that are so heavily sensitive to alternative-bearing environments like da(ghany), emie, Japanese -mo, Hindi/Urdu bhii, it is a potentially even greater challenge.
- If da(ghany) is stipulated to itself mean even, (64) would be difficult to explain by exhaustification. Appears to be quite similar to free-choice readings of or strengthened to and, analyzable as recursive exhaustification with O(nly) (Fox 2007, Fox and Katzir 2011).
- It is too much to say that da(ghany) is incompatible with additive presuppositions. The scalar even reading of da(ghany) typically has an additive presupposition.

(63) a. Question: En studjen-nar-yn beghehee kel-e syldjy-byt-tara duo?
you student-PL-2SG.POSS yesterday come-CVB AUX-PST-3PL Q
‘Did your students come over yesterday?’

b. Answer:
(i) onnooghor Sardaaana da(ghany) kel-e syldjy-byt-e
Even Sardaana da come-CVB AUX-PST-3SG
‘Even Sardaana came’

(ii) Uhuh. [Sardaana emie] kel-e syldjy-byt-e
yes Sardaana emie come-CVB AUX-PST-3SG
‘Yes, Sardaana also came’

- I have thus far given da(ghany) a very underspecified semantic contribution: it simply activates its host’s alternatives. This is partly to account for its both...and reading that it obtains in certain contexts:12

(64) Djulus [kofje da(ghany) čaj da(ghany)] is-(pe)-te
Djulus coffee da tea da drink-(NEG)-PST

a. (Positive): ‘Djulus drank both coffee and tea’

b. (Negative): ‘Djulus drank neither coffee nor tea’

- At the same time, all considered, if da(ghany) simply activated its host’s alternatives, we would predict free-choice indefinite readings with modals. This is not the case.

(65) [{kim emit / *kim da(ghany) / kim bagharar}] alaadjy si-en sōp
{who emit / who da / who bagharar} pancake eat-CVB can

a. (kim emit): ‘Someone (or other) can eat pancakes’

---

12The both...and reading of (64) is potentially another context where da(ghany) needs an additive presupposition, as it can be analyzed as two mutually-satisfying presuppositions (see Kobuchi-Philip’s (2009) proposal for Japanese -mo...-mo).
b. (kim bagharar): ‘Anyone can eat pancakes’

- *Prima facie*, this resembles a blocking effect. Consider now da(ghany) and emie compared also/even particles in Japanese, Hungarian, BCS, and Hindi/Urdu (Table 1):

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<th>Role</th>
<th>PTCL⇒</th>
<th>Sah</th>
<th>Jpn</th>
<th>Hun</th>
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<tr>
<td>iii. ‘even’</td>
<td></td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>e. DOUBLED</td>
<td></td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>i. (p ∧ q)</td>
<td></td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>ii. ‘nor’ (w/ neg)</td>
<td></td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>iii. ‘nor’ (0 neg)</td>
<td></td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
</tbody>
</table>


- a. ∀–GQ = Universal generalized quantifier,
- d. ADD = additive focus particle (i. also = additive reading in positives, ii. ‘either’ = additive negative reading, iii. ‘even’ = scalar additive).
- DOUBLED = doubled in a coordination construction (i. (p ∧ q) = ‘both...and’, ii. ‘nor’ (w/ neg) = negated disjunction with overt negation scoping over, iii. ‘nor’ (0 neg) = ‘neither...nor’ without negation scoping over.)

- blank (white) cells indicate contexts I lack positive or negative evidence for.

- Hungarian sem and BCS ni are negative-concord variants of is, i respectively. Note that they lack the basic “core of NPI”-licensing: grammaticality in the scope of negation, a phenomenon characterized by Pereltsvaig (2008) for Russian as “The Bagel Problem”

- At the same time, what direction could blocking go in? Intuitively, because da(ghany) has a wider distribution (more environments, seemingly more varied readings), this seems like the most likely (i.e., emie blocks da(ghany)).

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13 Bagharar is another Sakha quantifier particle that appears in universal free-choice items.

14 emie and da CAN be used together in bisyndetic conjunction:

(i) emie da bulčut, emie da balkysyt
    emie da hunter emie da fisherman
    ‘He is both a hunter and a fisherman’, ‘As he is a hunter, he is also a fisherman’

This is reported to have a particularly rhetorical flavor, like out of a folktale, and does not appear to be productive. Emie cannot serve this function by itself *emie X emie Y.
• If *emie* blocks *da(ghany)*...
  
  • *emie* is lexically specified to activate subdomain alternatives PLUS induce an additive presupposition (see Szabolcsi 2017 for an account of how to do so using O-exhaustification)
  
  • *emie* is also morphologically marked to behave like a free-choice item (perhaps for the same reason it activates additive presuppositions).
  
  • *da(ghany)*, on the other hand, is lexically specified only to activate all the alternatives of its host. If its host is an existential, it creates an NPI. If its host is a focused element, it cannot induce an additive presupposition, because *emie* blocks it from doing such (its use as a scalar ‘even’-marker “falls out” as an elsewhere condition because *emie* is not specified for a scalar alternative.
A Appendix

A.1 Sakha romanization conventions

- Sakha does not have a standardized romanization, so there is significant variation in transcriptions in the literature. At the same time the native script is highly phonetic (as opposed to phonemic), so I base my transcriptions on orthographic values of the script.
- At the same time, the script does not distinguish between place of articulation of velar obstruents [k, g, ɣ, x] and uvular obstruents [X, K, q]. Due to numerous historical sound changes (see Stachowski and Menz 1998, Pakendorf 2007, Pakendorf and Stapert 2020) and extensive consonant assimilation (regressive, progressive), accurate transcription of these segments is difficult.
- I follow a mixture of IPA values with departures based either on Turkological convention (e.g., ö for [ø]), or standard transcription conventions for romanizing Cyrillic (e.g. y for [i,u], Cyr. <л>,  for [j]).
- Relevant non-IPA values, with Turkological alternatives where they exist, are as follows

<table>
<thead>
<tr>
<th>Cyrillic</th>
<th>My convention</th>
<th>IPA</th>
<th>Turkological</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ё, ё, 5</td>
<td>Gh, gh</td>
<td>[ɣ, ɣ]</td>
<td>Г, ɣ</td>
<td>&lt;q&gt; in Vinokurova (2005); &lt;5&gt;=key location</td>
</tr>
<tr>
<td>Х, х</td>
<td>X, x</td>
<td>[x, ɣ]</td>
<td>X, x, Kh, kh; Q, q</td>
<td></td>
</tr>
<tr>
<td>Р, р</td>
<td>R, r</td>
<td>[r, r]</td>
<td>R, r</td>
<td>[r] syll. final, [r] intervocalic. [r] syll. initial (Russian loans only)</td>
</tr>
<tr>
<td>Ы, ы</td>
<td>Y, y</td>
<td>[i, u]</td>
<td>Ī, ĩ, I, i</td>
<td></td>
</tr>
<tr>
<td>Ч, ч</td>
<td>Ĉ, ķ</td>
<td>[ĉ, ķ]</td>
<td>Ĉ, ķ</td>
<td></td>
</tr>
<tr>
<td>Дь, дь</td>
<td>Dj, dj</td>
<td>[d̠j, d̠ʃ, d̠ʃ]</td>
<td>J, j</td>
<td></td>
</tr>
<tr>
<td>Е, е</td>
<td>E, e; Je, je</td>
<td>[e, je]</td>
<td>Ye, ye</td>
<td>Russian loans only</td>
</tr>
<tr>
<td>Э, э</td>
<td>E, e</td>
<td>[e, ɛ]</td>
<td>E, e</td>
<td></td>
</tr>
<tr>
<td>О, о</td>
<td>O, o</td>
<td>[o, ɔ]</td>
<td>O, o</td>
<td></td>
</tr>
<tr>
<td>И, и</td>
<td>I, i</td>
<td>[i, ɪ]</td>
<td>Ī, ĩ</td>
<td></td>
</tr>
<tr>
<td>Й, й</td>
<td>J, j</td>
<td>/j/, /j/</td>
<td>Y, y; Ū, Ŧ, ŧ</td>
<td>Nasal glide ĭ/ distinct phoneme from /j/, (not orthographically distinguished)</td>
</tr>
<tr>
<td>Ь, ь</td>
<td>j</td>
<td>[j]</td>
<td></td>
<td>palatalization (Russian loans)</td>
</tr>
<tr>
<td>Ьа, ьа</td>
<td>Ya, ya</td>
<td>[ia]</td>
<td></td>
<td>(Diphthongs)</td>
</tr>
<tr>
<td>Ьэ, ьэ</td>
<td>Ye, ye</td>
<td>ie, iэ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Уо, уо</td>
<td>Uo, uо</td>
<td>[ʊ, wʊ]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ḣо, Ḣо</td>
<td>Ḣо</td>
<td>[yо]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• Long vowels are transcribed as doubled (consistent with native orthography): $aa$ [aː], $ii$ [iː], $uu$ [uː], $yy$ [yː], $ee$ [eː], $öö$ [oː], $üü$ [yː], $oo$ [oː]

A.2 On alternation of daghany $\sim da$, emie $\sim eme$ $\sim$ emit:

The alternation between full daghany and reduced $da$ is poorly understood. It has been noted since the earliest descriptive work on Sakha (Böhtlingk 1851: §670). Native speakers have a strong intuition that they are the same morpheme. From the examples I have examined, there are a few generalizations about where the full or reduced form is available and it largely depends on the morphosyntactic position that $da$\textit{ghany} appears. Wherever full $daghany$ is acceptable, reduced $da$ is largely acceptable as well (but not vice versa). When the particle is hosted by a noun phrase, its position depends on the presence or absence of determiner-like elements (e.g. quantificational adjectives, possessive pronouns, demonstratives, and of course $biir$ ‘one’ in the NPIs). With a determiner, $da$ immediately follows the determiner. Otherwise, the particle invariantly follows the head noun.

This position-based alternation is especially salient with possessive pronouns, which are optional (e.g., min $uolum$ ‘my son’, $uolum$ ‘my son’). When a possessive pronoun is present, $daghany$ follows it (66a). It is ungrammatical to appear following the noun (66b).

(66) ‘even my grandfather’
\begin{itemize}
  \item a. min $da$?ghany\ ehe-em
  \begin{itemize}
    \item my $da$
    \begin{itemize}
      \item g.fthr.-1SG.POSS
    \end{itemize}
  \end{itemize}
  b. (*min) ehe-em $da$\textit{ghany}
  \begin{itemize}
    \item (my)\ g.fthr.-1SG.POSS $da$
  \end{itemize}
\end{itemize}

The full $daghany$ form in (66a) is judged as extremely awkward, though not ungrammatical. Interestingly, when the determiner-like element is three-syllables or more, the full $daghany$ form becomes acceptable:

(67) Bihigi $daghany$ ehe-bit
\begin{itemize}
  \item our $da$
  \begin{itemize}
    \item grandfather\-1PL.POSS
  \end{itemize}
  \begin{itemize}
    \item ‘even our grandfather’
  \end{itemize}
\end{itemize}

Note that there are contexts where reduced $da$ is dispreferred. E.g., when a focused-element is an entire clause (68):

(68) uol olor-but-un bil-bet $da$\textit{*ghany}
\begin{itemize}
  \item boy sit-PTPL-ACC know-NEG.AOR $da$
  \begin{itemize}
    \item ‘He didn’t even KNOW that the boy was sitting there’
  \end{itemize}
\end{itemize}

Positive $da$\textit{ghany}...$da$\textit{ghany} coordination also shows interesting patterns (69). In more neutral contexts, either one or both coordinad can appear reduced (69a)–(69c). In contexts where the speaker is correcting an exclusive disjunction it is slightly preferred for both coordinads to be marked with full $daghany$ (69d) (e.g., if (69) is said after somebody has claimed that Djulus would drink only one of coffee or tea, not both).

(69) Djulus [kofje $daghany$ čaj $daghany$] is-te
\begin{itemize}
  \item Djulus coffee $da$ tea $da$
  \begin{itemize}
    \item drink-PST
  \end{itemize}
  \begin{itemize}
    \item ‘Djulus drank both coffee and tea’
  \end{itemize}
\end{itemize}
\begin{itemize}
  \item a. ... kofje $da$ čaj $da$ ...
  \item b. ... kofje $daghany$ čaj $da$ ...
  \item c. ... kofje $da$ čaj $daghany$ ...
  \item d. ... kofje $daghany$ čaj $daghany$ ...
\end{itemize}

These facts seem to indicate that full $daghany$ is more conducive to emphasis, likely because it is long (and hence more stressable) and serves to highlight its focus better than reduced $da$.

Historically, $da$\textit{ghany} is undoubtedly related to Old Turkic $taq/i\textit{taki}$, which was used as a conjunction meaning ‘and’ (Tekin 1997: 169, Erdal 2004: 337, 348, 509) and a scalar additive (Tekin 1997: 158, Erdal...
It does not form NPIs in Old Turkic. The source of the final -ny/-ni is mysterious. It resembles the synchronic accusative case allomorph following a vowel-final syllable in /a/: e.g. Tujara-ny ‘Tujara (accusative)’. Haspelmath (1993), citing Ubrjatova (1982: 202) notes that colloquially, Sakha actually allows inflectional morphemes to follow both the interrogative and its particle:

(70) a. kim-i eme(%)ni
    who-ACC PTCL-(ACC)  
    ‘somebody/anybody’

b. kim-ten  eme(%)tten
    who-ABL PTCL-(ABL)    
    ‘from somebody/anybody’

c. tuox-ta  eme(%)te
    what-LOC PTCL-(LOC)    
    ‘at something/anything’

Assuming the pattern in (70) was productive historically, it is possible that daghany derives from an etymological stem *dagha suffixed with accusative -NI, yielding daghany.

As for the emie ∼ eme ∼ emit alternation, as a focus particle ‘also/too/either’, ‘again’, the form emie is always used. The difference between eme and emit seems to be dialectal, and also seems to depend on the host word. All examples in Haspelmath (1997) for WH+PTCL contain the eme form. Further, the sakhatyla.ru entry for emie makes no reference to its combination with WH-words or biir ‘one’. Similarly, the entry for emie suggests that it is exclusively used as a particle quantifier particle. Regarding emit, it appears to be a feature of my consultant’s dialect for emie/eme combining with interrogative pronouns. It lacks an entry on sakhatyla.ru, though google searches of interrogatives combined with it produce numerous hits. The source of the final -t is mysterious, though following the possiblity of inflected particle (70) for the [ni] in daghany, it is possibly derived from an eroded case ending.

References


