## "Sakha *da(qanɨ)*: Negative Polarity, Conjunction, and Focus"
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This paper investigates the morphosyntax and semantics of the Sakha particle *daqanɨ* ⟨даҕаны⟩ [daʁanɨ] and its reduced form *da* ⟨да⟩, based on elicited data. *Da(qanɨ)* appears in varied yet heavily constrained environments, which include negative polarity item (NPI) uses (licensed by negation and comparatives) and an additive/conjunction use.

**1. NPI:** Sakha NPIs are constructed with WH-words+*da(qanɨ)* (1) and the numeral *biir* 'one': *biir*+*da(qanɨ)* (2).

(1)  a.  Kim {da/daqanɨ} iti    it-ɨ      (sɨrsɨ-ba-t-a          / *sɨrɨs-t-a)
         who *da*          that dog-ACC chase-NEG-PST-3SG / chase-PST-3SG
         literally: 'anybody didn't chase that dog', equivalent to English 'Nobody chased that dog'
     b.  Tugu     {da/daqanɨ} (aax-pa-taq-ɨm      / *aax-pit)
         what.ACC *da*          read-NEG-PST.1SG / read-PST
         'I didn't read anything'
     c.  Djulus kim-neeqer *(da/daqanɨ) uhun
         D.     who-CMPR    *da*          tall
         'Djulus is taller than anyone'

(2)  a.  Min biir da kinige-(ni)  (aax-pa-t-ɨm        / *aax-t-ɨm)
         1SG one *da* book-(ACC) read-NEG-PST-1SG / read-PST-1SG
         'I didn't read any book' / *'I read any book'
     b.  biir {da/daqanɨ} kinige-(ni) aax-pakka     ereeri      ÿören-n-ɨm
         one *da*          book-ACC   read-NEG.CVB even.though study-PST-1SG
         'I studied without reading any book(s)'

*Da(qanɨ)* NPIs are licensed by direct negation (1-a)-(1-b), (2), but not indirect negation (3) ([1,2] for similar judgments).

(3)  *Djulus miigin   tugu      {da/daqanɨ} aax-pit       dii sanaa-ba-tax
      D.      1SG.ACC what.ACC *da*          read-PST.3SG CMP think-NEG-PST
      'Djulus didn't think I read anything'

It is cross-linguistically irregular for an item to be licensed in direct negation and comparatives to the exclusion of indirect negation [3]. Still, it is known that in languages lacking an overt determiner (i.e. *the*) indirect negation often anti-licenses NPIs [4]. This paper argues that the semantics of the comparatives case marker -*TĀqAr* includes a covert negative.

In *biir da(qanɨ)* (2), note that accusative marking on the object is optional and results in no difference in meaning. Sakha is a differential object marking (DOM), with accusative appearing on specific objects. This specificity is neutralized in *biir da(qanɨ)* NPs. This cannot be caused by negation alone, as without *da(qanɨ)*, DOM still results in a unmarked non-specific (4), marked specific (5) distinction:

(4)  kini biir kulaxɨ  sje-be-t-e          (5)  kini biir kulaxɨ-nɨ    sje-be-t-e
     3SG one bedbug eat-NEG-PST-3SG            3SG one bedbug-ACC eat-NEG-PST-3SG
     'He didn't eat (even) one bedbug'          'There is one bedbug which he didn't eat'

It will be argued that *da(qanɨ)* NPIs neutralize this specificity requirement because they are obligatorily exhaustifed by an O(nly) operator [5]. Why it is that this results accusative case marking on *biir da(qanɨ)* being optional is an open question, but one option is that it is assigned by a functional head in in cases like (5), but assigned by structural configuration in *biir da(qanɨ)* NPIs (2) [1].

**2. Additive:** The second use of *da(qanɨ)* has an additive, conjunction sense (6), hence the tendency of many grammars to translate it as *and, also, even* [6,7]. This is similar its Turkish cognate -*de*.

(6)  Djulus [djaabɨlɨka ɨtɨr-aat  {da/daqanɨ} kofje ih-eet       {da/daqanɨ}] suur-e    tur-d-a
      D.      apple       bite-CVB *da*          coffee drink-CVB *da*          run-CVB stand-PST-3SG
      'Djulus ran off after eating an apple and drinking coffee'

Aside from the meaning, additive *da(qanɨ)* is distinguishable from the NPI uses in that it can modify a larger set of types of phrases, such as VPs (6), common nouns (7-a) and proper names (7-b).

(7)  a.  Djulus kofje-(nï)  {da/daqanï}  čaj-(ï)  {da/daqanï}  is-t-e
       D.     coffee-ACC *da*       tea-ACC *da*        drink-PST-3SG
     b.  Tujara-lïin  {da/daqanï}  Erkin-niin  {da/daqanï}  kepset-t-e
       Tujara-COM *da*       Erkin-COM *da*        speak-PST-3SG
       'He talked with both Tujara and Erkin'

One thing to note is that in these non-NPI environments, *da(qanï)* is pragmatically marked. For example, (7-a) is most natural as an answer to an alternative question (e.g. *Did Djulus drink coffee or (did he drink) tea?*), but odd without context. This is consistent with analyzing it as a focus-sensitive particle.

Interestingly, when coordinated *da(qanï)* phrases appear under the scope of negation, the NPI meaning re-emerges: They cannot scope over negation (8) and remain anti-licensed by indirect negation (9)

(8)  Djulus kofje-(nï)  {da/daqanï}  čaj-(nï)  {da/daqanï}  is-pe-t-e
     D.     coffee-ACC *da*       tea-ACC *da*        drink-NEG-PST-3SG
     ✓narrow-scope: ¬(coffee ∨ tea)     *wide-scope: ¬(coffee ∧ tea)

(9)  *Djulus miigin  kofje-nï  {da/daqanï}  čaj-ï  {da/daqanï}  is-pit   dii  sanaa-ba-tax
     D.     1SG.ACC coffee-ACC *da*       tea-ACC *da*        drink-PST CMP think-NEG-PST
     'Djulus didn't think I drank coffee or tea' (¬(coffee ∨ tea))

If additive *da(qanï)* were an entirely separate lexical item, we would expect that it would emerge in contexts like (9) and the sentence would mean 'Djulus didn't think I drank both coffee and tea'. Moreover the same alternation between full *daqanï* and reduced *da* is present in both additive and NPI uses. It follows that additive and NPI *da(qanï)* are the same word and have the same semantics.

**Proposal:** Most grammars of Sakha say that *da* and *daqanï* are related in some sense [6,7], though they don't elaborate on any differences between them. I propose that *da* is a phonologically reduced form of *daqanï*, which is (optionally) able to be reduced in non-focused environments, with a covert focus operator E(ven) preventing *daqanï* from being reduced.

Semantically, the distribution of *da(qanï)* is surprising. It is standardly assumed that NPIs are existentials [5,8], so for it to appear in additive environments with a universal (*and*) meaning is difficult to account for. How can a word mean *or* in negative environments and mean *and* in positive environments? While Japanese *-mo* famously appears as an NPI under negation and a universal quantifier in upward entailing environments [9], Sakha *da(qanï)* lacks the latter uses (nor does it have any obvious free choice uses), thus analyses *-mo* are not directly portable to the Sakha data.

This paper explores one proposal for the semantics, using Chierchia's alternative semantics approach to NPIs [5]. I propose that, fundamentally *da(qanï)* is an existential with a set of lexically specified alternatives. Unlike English *any* (10), *da(qanï)* (11) lacks a scalar alternative ($p \wedge q$). Like *any*, the domain alternatives $\{p,q\}$ come out of the lexicon "pre-exhaustified" by the operator O.

(10)  a.  $[\![any]\!] = p \vee q$          (11)  a.  $[\![da(qanï)]\!] = p \vee q$
      b.  ALT($any$) = $\{O(p),O(q),p \wedge q\}$        b.  ALT($daqanï$) = $\{O(p),O(q)\}$
          = $\{p \wedge \neg q, q \wedge \neg p, p \wedge q\}$              = $\{p \wedge \neg q, q \wedge \neg p\}$

Words like *any* and *daqanï* themselves must be exhaustified, as they are alternative-sensitive. In positive environments, exhaustifying over the scalar alternative results in a contradiction (12-b). Because *da(qanï)* lacks a scalar alternative, no contradiction emerges and the existential (*or*) meaning is strengthened to a universal (*and*). In essence, additive *da(qanï)* stops at (12-a).

(12)  a.  $O_{\text{D-ALTS}}(p \vee q) = (p \vee q) \wedge \neg(p \wedge \neg q) \wedge \neg(q \wedge \neg p)$
          $=(p \vee q) \wedge p \rightarrow q \wedge q \rightarrow p \equiv (p \vee q) \wedge p \leftrightarrow q$
      b.  $O_{\text{SCALAR-ALT}}(p \vee q) = (p \vee q) \wedge \neg(p \wedge q) \perp$ (contradicts (12-a))

When *da(qanï)* is used with WH-words or *biir*, the scalar alternative is added because these words themselves have a scalar alternative, as they are existentials. Like *any*, this results in an LF which is only interpretable under the scope of negation.

**References:**  [1] Baker and Vinokurova (2010) "Two modalities of case assignment: case in Sakha", [2] Vinokurova (2005) *Lexical categories and argument structure: a study with reference to Sakha*, [3] Haspelmath (1997) *Indefinite Pronouns*, [4] Bošković and Şener (2014) "The Turkish NP", [5] Chierchia (2013) *Logic in Grammar*, [6] Böhtlingk (1964 [1851]) *Über die Sprache der Jakuten*, [7] Krueger (1962) *Yakut Manual*, [8] Ladusaw (1979) *Polarity Sensitivity as Inherent Scope Relations.*, [9] Shimoyama (2006) "Indeterminate Phrase Quantification in Japanese"