Case and the Interpretation of Indefinites in Uyghur[*]

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1 Introduction

In this talk, I consider the relationship between **case-marking** and the **scope** and definiteness of noun phrases in Uyghur. Data on direct objects suggests the following generalization:

Restriction on reconstruction in Uyghur:

(1)   Reconstruction of overtly case-marked indefinites is prohibited.

Nominalized embedding constructions provide further evidence for this proposal.

Nominalized embedding (non-modal adjective):

(2)   qɨz-(nɨŋ) kil-iʃ-i   muhim
       girl-(gen) come-ISH-3 important
       'It's important for a girl to come.'

Embedding by a **non-modal** adjective:

- The subject remains inside the -*ish* phrase.
- An unmarked subject must scope below the adjective, while a genitive-marked subject can take high or low scope.

Nominalized embedding (modal adjective):

(3)   qɨz-(nɨŋ) kil-iʃ-i   kirek
       girl-(gen) come-ISH-3 necessary
       'It's necessary for a girl to come.'

Embedding by a **modal** adjective:

- The subject raises out of the -*ish* phrase.
- An unmarked subject can take high or low scope, while a genitive-marked subject must scope above the adjective.

There are thus major differences between:

- embedding by non-modal and modal adjectives
- unmarked and genitive-marked subject options

The **scope facts** follow from the **structural position** of the subject, together with the **restriction on reconstruction**.

2 Theoretical Background

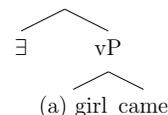Following Diesing (1992), I assume:

- There is an existential closure operator at the VP/vP level that binds all free variables in its scope.

Two interpretation options for indefinites:

- binding by existential closure
- generalized quantifier, Quantifier Raising (QR)

(4)   A girl came.

(5)   a.   **Existential Closure:**   b.   **QR:**
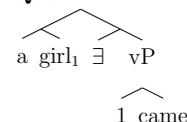
3 Direct Objects

Accusative-marked objects have different scope properties from subjects, which are always unmarked.

Accusative-marked direct objects:

- raise out of the scope of existential closure
- *cannot* reconstruct

(Unmarked) subjects:

- raise out of the scope of existential closure
- *can* reconstruct

This motivates:

Restriction on reconstruction in Uyghur: (repeated from (1))

(6)   Reconstruction of overtly case-marked indefinites is prohibited.

3.1   Data

Uyghur direct objects can be:

- accusative-marked & high
- unmarked & low

Uyghur direct objects:[1]

(7)   Mehemmet (*jaχʃi) nan-ni   (jaχʃi) jaχ-t-i
       Mehemmet (**well**) bread-**acc** (**well**) bake-past-3
       'Mehemmet baked the bread well.'

(8)   Mehemmet (jaχʃi) nan   (*jaχʃi) jaχ-t-i
       Mehemmet (**well**) bread (**well**) bake-past-3
       'Mehemmet baked bread well.'

Accusative-marked objects scope higher than unmarked objects.

Uyghur DO's – case-marking and interpretation:

(9)   men kök miʃuk-ni izi-wat-i-men
       I   blue cat-**acc** look.for-prog-impf-1sg
       'I'm looking for a (specific) blue cat.' [de re]

(10)   men kök miʃuk izi-wat-i-men
       I   blue cat   look.for-prog-impf-1sg
       'I'm looking for a blue cat.'   [de dicto]

3.2   Proposal

It has been commonly proposed (Diesing (1992), Kelepir (2001), Cagri (2005)) that Turkish unmarked objects are inside VP, while accusative-marked direct objects are outside of VP. I propose for Uyghur that accusative-marked objects raise to the specifier of v_{CASE}P.
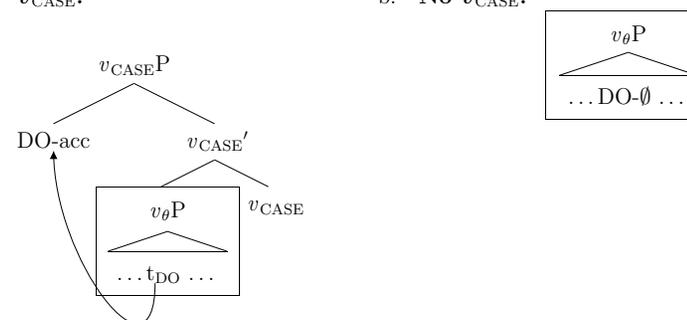
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[1]Data from MIT Spring 2009 graduate field methods (24.942) class notes.

v_{CASE}:

- assigns overt accusative
- has an EPP feature
- is higher than v_θ
- projected **optionally**

v_θ:

- assigns subject theta-role
- is lower than v_{CASE}
- v_θP is the scope of existential closure

(11)   a. v_{CASE}:   b.   **No v_{CASE}:**

Note that an noun phrase inside the scope of existential closure, such as an unmarked object, cannot be definite:

(12)   Mehemmet Ötkur-*(ni)   kör-d-i
       Mehemmet Ötkur-***(acc)** see-past-3
       'Mehemmet saw Ötkur.'

3.3   Reconstruction

Accusative-marked objects: cannot reconstruct into base position from spec, v_{CASE}P

Unmarked subjects: can reconstruct into base position from spec, TP; note that matrix subjects are **always unmarked**

No existential closure for accusative-marked object:

(13)   men kök miʃuk-ni izi-wat-i-men
       I   blue cat-**acc** look.for-prog-impf-1sg
       'I'm looking for a (specific) blue cat.' [de re]

       * 'I'm looking for a blue cat.' [de dicto]

**Existential closure possible for (unmarked) subject:**

(14) iht sirt-ta   qawi-wat-i-du
      dog outside-loc bark-prog-impf-3
      '(Particular) dogs are barking outside.'

      'There are dogs barking outside.' [existential]

The following sections will show that this is not just a subject vs. object difference. Proposal:
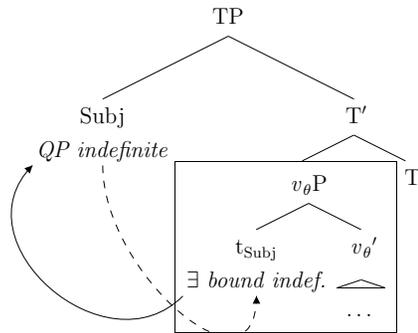
Restriction on reconstruction in Uyghur: (repeated from (1))

(15)   Reconstruction of overtly case-marked indefinites is prohibited.

(16)   **Accusative-marked object:**
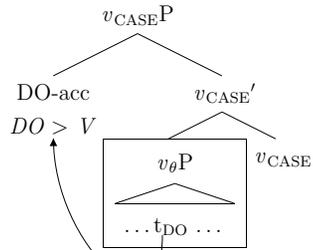
(17)   **Subject:**

4   Non-Modal Proposition-Taking Adjectives

In this section:

- *-ish* phrases are possessed DPs.
- The optional presence of Gen accounts for the *-ish* phrase subject case alternation, and the corresponding subject scope properties.

4.1   The Nominal Nature of *-ish* Phrases

A non-modal adjective like *muhim* ('important') can embed:

- a regular DP
- an **-ish phrase**

Possessed DP:

(18)   min-*(iŋ) kitav-im   muhim/eχmijetlik
       I-*(gen) book-**1sg** important/useful
       'My book is important/useful.'

Possessed -ish phrase:

(19)   min-*(iŋ) oqu-ʃ-im   muhim/eχmijetlik
       I-*(gen) read-ISH-**1sg** important/useful
       'My reading is important/useful.'

Proposal for -ish:

(20)   *-ish* is a nominalizing suffix.

This proposal is supported by the fact that *-ish* phrases:

- bear possessor agreement (see above)
- bear case morphology (see below)

The subject of a directly embedded proposition in Uyghur can be accusative-marked. This results in a non-shifted (i.e. matrix context, not embedded context) (Schlenker (1999)) interpretation for pronouns. (Shklovsky and Sudo (2009))

Verbal predicate – accusative-marked subject:

(21)   Ahmet [min-iŋ qiz-im-ni   ket-t-i]   didi
       Ahmet [I-gen   girl-1sg-**acc** leave-past-3] said
       'Ahmet said that my daughter left.'

An *-ish* phrase embedded under a non-modal adjective can also be marked accusative:

Non-modal adjective – accusative-marked -ish phrase:

(22)   Ötkur [min-iŋ oqu-ʃ-im-ni   muhim]   didi
       Ötkur [I-gen   study-ISH-1sg-**acc** important] said
       'Ötkur said that my studying is important.'

Thus an **-ish phrase** embedded by a non-modal adjective behaves just like a **possessed DP subject**.

4.2 Case-Marking and Scope of *-ish* Phrase Subjects

The subject of an *-ish* phrase under a non-modal adjective can be genitive-marked or unmarked.

Genitive-marked subject:

- definite or indefinite
- scopes above or below adjective

Unmarked subject:

- indefinite only
- scopes below adjective

Key points:

- A genitive-marked subject raises out of the scope of existential closure to satisfy EPP on Gen, and can take scope even higher through QR.
- An unmarked subject remains in the scope of existential closure.

Genitive-marked *-ish* phrase subject – high or low:

(23)   qɨz-nɨŋ kil-iʃ-i   muhim
       girl-gen come-ISH-3 important
       'It's important for a girl to come.'

       [∃ > important]

       [important > ∃]

Unmarked *-ish* phrase subject – low only:

(24)   qɨz kil-iʃ-i   muhim
       girl come-ISH-3 important
       'It's important for a girl to come.'

       *[∃ > important]

       [important > ∃]

Definite *-ish* phrase subject – genitive-marked only:

(25)   Ajgül-*(nuŋ) kil-iʃ-i   muhim
       Ajgül-*(gen) come-ISH-3 important
       'It's important for Ajgül to come.'

Proposal: An *-ish* phrase **optionally** contains the functional projection **Gen** (similar to v_{CASE}), which:
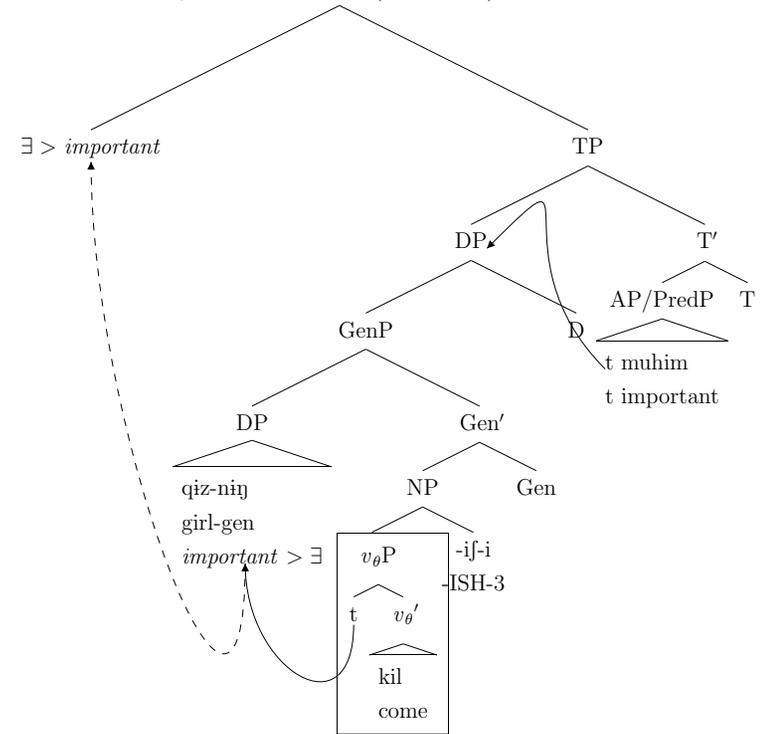
- assigns genitive case to the possessor/subject
- has an EPP feature

There are two possible *-ish* phrase structures.

Genitive *-ish* phrase subject: (repeated from example (23))

(26)   qɨz-nɨŋ kil-iʃ-i   muhim
       girl-gen come-ISH-3 important
       'It's important for a girl to come.'

(27)   **Non-modal adjective structure (with Gen):**

- The *-ish* phrase subject is outside the scope of existential closure.
- spec, GenP is below the scope of the adjective.
- The *-ish* phrase subject can scope about the adjective with QR.

Unmarked -*ish* phrase subject: (repeated from example (24))

(28) qïz kil-iʃ-i   muhim
      girl come-ISH-3 important
      'It's important for a girl to come.'

(29) **Non-modal adjective structure (without Gen):**
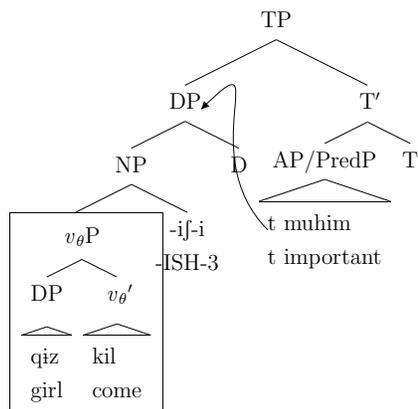
- The -*ish* phrase subject is inside the scope of existential closure. Consequently:
  - The -*ish* phrase subject must take low scope.
  - Definites are prohibited.

Ordering with respect to adverbials confirms that an unmarked subject is lower than a genitive-marked subject. Adverb placement:

- above or below genitive-marked subject
- above unmarked subject

Unmarked subject is lower than genitive subject:

(30) (æte)   Ajgül-niŋ/qïz-niŋ (æte)   kil-iʃ-i   muhim
      (tomorrow) Ajgül-gen/girl-gen (**tomorrow**) come-ISH-3 important
      'It's important for Ajgül/[a girl] to come tomorrow.'

(31) (æte)   qïz (??æte)   kil-iʃ-i   muhim
      (tomorrow) girl (**??tomorrow**) come-ISH-3 important
      'It's important for a girl to come tomorrow.'

Section summary:

- -*ish* phrases are nominal.

- An -*ish* phrase optionally contains Gen, which:
  - assigns genitive case
  - has an EPP feature
- The properties of Gen explain the scope and definiteness facts for -*ish* phrase subjects.

5 Modal Adjectives

In this section, I show that the subject of the -*ish* phrase under a modal adjective *raises* out of the -*ish* phrase. Together with the restriction on reconstruction and the properties of Gen, this explains the relationship between -*ish* phrase subject case and scope.

Modal adjectives:

kirek: deontic/epistemic necessity
lazim: deontic/epistemic necessity
mumkin: epistemic possibility

5.1 Evidence Showing that -*ish* Phrase Subjects are High

Recall: The subject of a directly embedded proposition in Uyghur can be accusative-marked.

Verbal predicate – accusative subject: (repeated from (21))

(32) Ahmet [min-iŋ qïz-im-ni   ket-t-i]   didi
      Ahmet [I-gen girl-1sg-**acc** leave-past-3] said
      'Ahmet said that my daughter left.'

Non-modal adjectives:

    -*ish* phrase: can be accusative-marked
    -*ish* phrase subject: cannot be accusative-marked

Modal adjectives:

    -*ish* phrase: cannot be accusative-marked
    -*ish* phrase subject: can be accusative-marked

Non-modal adjective – accusative -*ish* phrase: (repeated from (22))

(33) Ötkur [min-iŋ oqu-ʃ-im-ni   muhim]   didi
      Ötkur [I-gen study-ISH-1sg-**acc** important] said
      'Ötkur said that my studying is important.'

Non-modal adjective – no accusative marking on subject of -*ish* phrase:

(34) *Mehemmet [Ajgül-ni   oqu-ʃ-i   muhim]   didi
      Mehemmet [Ajgül-**acc** study-ISH-3 important] said

Modal adjective – accusative subject:

(35) Ötkur [mini oqu-ʃ-[i/iŋ]   kirek]   didi
      Ötkur [I-**acc** study-[3/2sg] necessary] said
      'Ötkur said that my studying is necessary.'

Modal adjective – no accusative marking on -*ish* phrase:

(36) *Mehemmet [Ajgül-[∅/niŋ/ni]   oqu-ʃ-i-ni   kirek]   didi
      Mehemmet [Ajgül-[nom/gen/acc] study-ISH-3-**acc** necessary] said

Shklovsky and Sudo (2009) propose:

- unmarked embedded subjects are low
- accusative-marked embedded subjects are high

Non-modal adjectives: -*ish* phrase raises and gets accusative

Modal adjectives: -*ish* phrase **subject** raises and gets accusative

This suggests that with modal adjectives, the subject of the -*ish* phrase is high:

- outside of -*ish* phrase
- in main clause subject position

Further evidence showing that the subject of an -*ish* phrase under a modal adjective is high is given in Appendix C.

5.2   Proposal

Proposal for non-modal vs. modal adjectives:

(37) a. When the embedding predicate is a non-modal adjective, the -*ish* phrase raises to spec, TP to satisfy EPP.
      b. When the embedding predicate is a modal adjective, the **subject** of the -*ish* phrase raises to spec, TP to satisfy EPP.

Motivation of difference between modal and non-modal adjectives (following Trinh (2009)):

(38) a. The -*ish* phrase that combines with non-modal adjectives is a DP.
      b. The -*ish* phrase that combines with modal adjectives is an NP/GenP.
      c. T in Uyghur has an EPP property that must be satisfied by a DP.

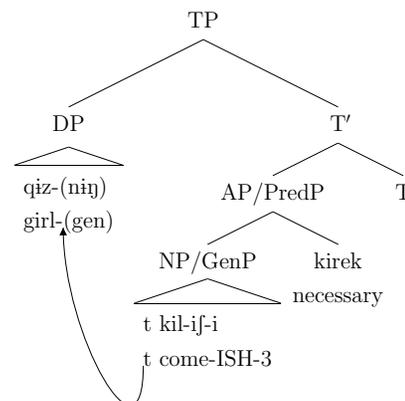Compare the modal and non-modal adjective structures.

Adjectival embedding:

(39) qɨz-(nɨŋ) kil-iʃ-i   muhim/kirek
      girl-(gen) come-ISH-3 important/necessary
      'It's important/necessary for a girl to come.'

(40) **Non-modal adjective (*abbr.*) – -*ish* phrase satisfies EPP of T:**
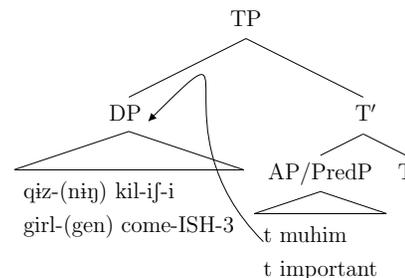
(41) **Modal adjective (*abbr.*) – subject of -*ish* phrase satisfies EPP of T:**

Note that modal adjectives are not control predicates.

Arguments in favor of a raising analysis:

Modal adjectives: Negation on the embedded phrase **licenses** a Negative Concord Item (NCI) subject.

Control predicates: Negation on the embedded phrase **does not license** an NCI subject.

Arguments against a control analysis:

Modal adjectives: Possessor agreement on the -*ish* phrase is **obligatory** with first and second person subjects.

Control predicates: Possessor agreement on the -*ish* phrase is **prohibited**.

The relevant data is given in Appendix D.

5.3 Subject Case and Interpretation

The subject of the -*ish* phrase with modal adjectives has the following properties.

Genitive-marked subject:

- definite or indefinite
- **scopes above adjective**

Unmarked subject:

- **definite** or indefinite
- **scopes above or below adjective**

Key points:

- Both genitive-marked and unmarked subjects raise to spec, TP.
- Unmarked subjects can reconstruct, but genitive-marked ones cannot.

Restriction on reconstruction in Uyghur: (repeated from (1))

(42) Reconstruction of overtly case-marked indefinites is prohibited.

Genitive -*ish* phrase subject – high only:

(43) qɨz-nɨŋ kil-iʃ-i kirek
girl-gen come-ISH-3 necessary
'A girl has to come.'

[∃ > necessary]
*[necessary > ∃]

Unmarked -*ish* phrase subject – high or low:

(44) qɨz kil-iʃ-i kirek
girl come-ISH-3 necessary
'A girl has to come.'

[∃ > necessary]
[necessary > ∃]

Modal (necessity) adjectives – unmarked definites possible:[2]

(45) men-(ɨŋ) kitap oqu-ʃ-im kirek/lazim
I-(**gen**) book read-ISH-1sg necessary
'I have to read a book.'

Non-modal adjectives – unmarked definites prohibited:

(46) min-*(ɨŋ) kitap oqu-ʃ-im muhim/eχmijetlik
I-*(**gen**) book read-ISH-1sg important/useful
'My reading a book is important/useful.'

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[2]Genitive-marked subjects are prohibited with *mumkin* ('possible'); I have no account of this.

Genitive -*ish* phrase subject: (repeated from (43))

(47) qɨz-nɨŋ kil-iʃ-i kirek
girl-gen come-ISH-3 necessary
'A girl has to come.'

(48) **Modal adjective – genitive-marked subject structure:**
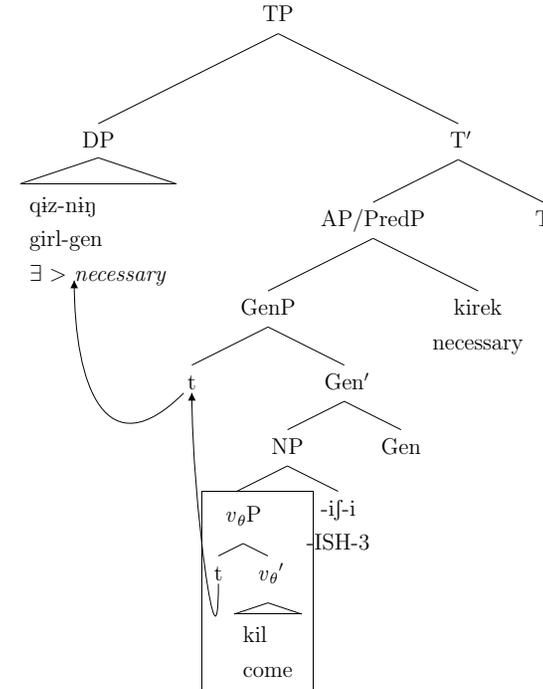
- The -*ish* phrase subject raises to spec, TP, which is above the scope of the adjective.
- By the restriction on reconstruction, the -*ish* phrase subject **cannot** reconstruct, so low scope is not possible.
- The -*ish* phrase subject is outside v_θP, and thus can be definite.

Unmarked -*ish* phrase subject: (repeated from (44))

(49) qïz kil-iʃ-i   kirek
      girl come-ISH-3 necessary
      'A girl has to come.'

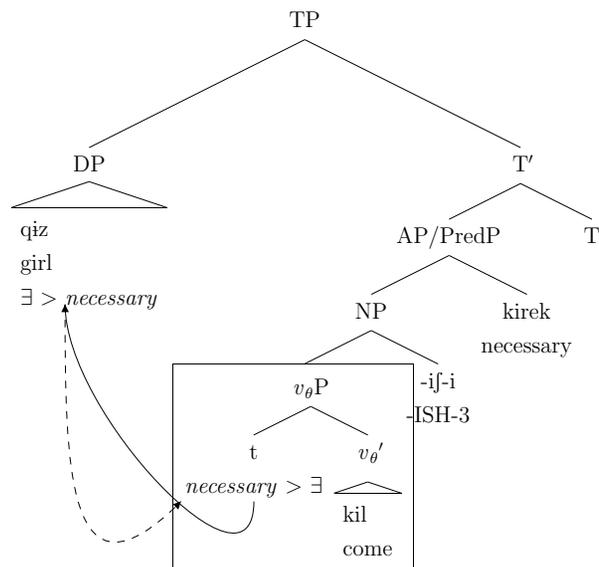(50)   **Modal adjective – unmarked subject structure:**

- The -*ish* phrase subject raises to spec, TP, which is above the scope of the adjective.
- By the restriction on reconstruction, the -*ish* phrase subject **can** reconstruct, so low scope is not possible.
- The -*ish* phrase subject is outside v_θP, and thus can be definite.

6   Summary

The following proposals account for the relationship between case-marking and scope and definiteness in Uyghur:

Case assignment and EPP: v_{CASE} and Gen, which are generated optionally, assign overt case and bear an EPP feature. This accounts for the null/accusative alternation for direct objects, and the null/genitive alternation in nominalized clauses. It explains why case-marked noun phrases are higher than unmarked ones (unless further movement takes place).

-*ish* phrases: -*ish* phrases are nominal. With non-modal adjectives, the -*ish* phrase moves to spec, TP to satisfy EPP on T, whereas with modal adjectives, the subject of the -*ish* phrase raises to spec, TP.

Restriction on reconstruction: Reconstruction of overtly case-marked indefinites is prohibited.

References

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A   Bare Nominals vs. Quantified Nominals

Preliminary evidence suggests that quantified nominals have a broader range of scope options than the bare nominals discussed in above:

Modal adjective, genitive *-ish* phrase subject – high or low scope:

(51) ikki qïz-nïŋ   kül-iʃ-i   kirek
      two girl-gen smile-ISH-3 necessary
      'Two girls have to smile.'

[two > necessary]

[necessary > two]

This indicates that the restriction on reconstruction may only apply to bare indefinites, but further investigation is needed.

B   Comments on Case

Questions about Uyghur case (set aside so far):

- Do unmarked noun phrases have case?
- If so, what kind of case, and where does it come from?
- If not, how are they licensed?
- Why is their case distinguished from overt case for the purposes of reconstruction?
- Should null nominative case be distinguished from other null cases?

There is a range of possible views:

Very problematic: All noun phrases require case.

Problematic for restriction on reconstruction: Some noun phrases are bare NPs, and bare NPs do not require case. (Cagri (2005), Öztürk (2005))

Best fits the data: Noun phrases do not require case. (Shklovsky and Sudo (2010))

Restriction on reconstruction in Uyghur: (repeated from (1))

(52)   Reconstruction of overtly case-marked indefinites is prohibited.

B.1   All Noun Phrases Require Case

Proposal:

- accusative and genitive have null allomorphs
- null accusative and genitive are assigned in situ

Problems:

- large variety of null cases (nominative, accusative, genitive)

- that the null variants of accusative and genitive are both assigned in situ is arbitrary

Facts that seem systematic come out as arbitrary on this proposal.

B.2   NPs Do Not Require Case (Cagri (2005) for Turkish)

This proposal was originally made for Turkish; we will consider how well it could be applied to Uyghur.

Proposal:

- some noun phrases are DPs, and some are NPs
- DPs require case
- NPs do not receive case
- nominative (which is morphologically null) is a real case
- NPs cannot be definite; they take low scope
- only DPs can satisfy EPP (on T)
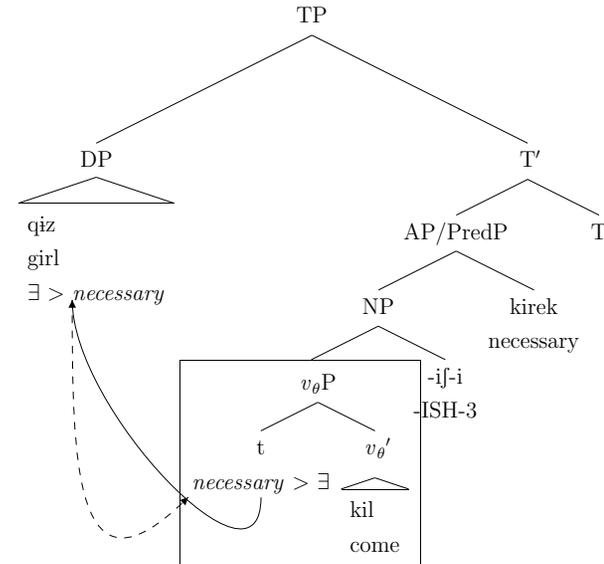
Possible reformulation of restriction on reconstruction in Uyghur:

(53)   DPs cannot reconstruct.

Problem: Incorrect prediction for unmarked *-ish* phrase subjects under modal adjectives.

- subject satisfies EPP on T → must be a DP
- subject a DP → cannot reconstruct under existential closure (false!)

(54)   **Modal adjective – unmarked subject structure:**

There is no natural way to formulate the restriction on reconstruction in a way that fits the data.

B.3 No Case Required (Shklovsky and Sudo (2010))

Proposal:

- noun phrases do not require case
- all unmarked noun phrases are caseless
- some noun phrases bear an abstract feature that is targeted by an accusative-assigning head with EPP
- alternative formulation: v_{CASE} and Gen can target any DP, but are present optionally

Possible reformulation of restriction on reconstruction in Uyghur:

(55)   Case-bearing noun phrases cannot reconstruct.

This proposal fits well with the data discussed.

C Evidence for High Surface Position of *-ish* Phrase Subject under Modal Adjectives

Data showing that the subject of the *-ish* phrase is outside the *-ish* phrase at some level in modal adjective constructions:

- direct embedding (seen above)
- placement of *bolsa* (in this section)
- placement of *mu* (in this section)

C.1 *Bolsa*

Bolsa (morphologically *bol* ('be') + *-sa* (conditional suffix)) is a topic marker. With modal adjectives, it can appear directly after the subject to the *-ish* phrase, but not after the entire *-ish* phrase.[3]

Modal adjectives – *bolsa* after *-ish* phrase subject:

(56)   men-(iŋ) bolsa oqu-ʃ-im   kirek/lazim
         I-(gen)   **top**   read-ISH-1sg necessary
         'My reading is necessary.'

(57)   men bolsa oqu-ʃ-im   mumkin.
         I   **top**   read-ISH-1sg possible
         'My reading is possible.'

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[3]The data in this subsection for *kirek* ('necessary') and *qimmet* ('expensive') is also found in Trinh (2009).

Modal adjectives – no *bolsa* after *-ish* phrase:

(58)   *men-(iŋ) oqu-ʃ-im   bolsa kirek/lazim/mumkin.
         I-(gen)   read-ISH-1sg **top**   necessary/necessary/possible

Thus the *-ish* phrase is **not a constituent** for the purposes of *bolsa* placement with modal adjectives. Non-modal adjectives display the opposite pattern.

Non-modal adjectives – *bolsa* after *-ish* phrase:

(59)   min-iŋ oqu-ʃ-im   bol-sa muhim/eχmijetlik/qimmet
         I-gen read-ISH-1sg **top**   important/useful/expensive
         'My reading is important/useful/expensive.'

Non-modal adjectives – no *bolsa* after *-ish* phrase subject:

(60)   *min-iŋ bol-sa oqu-ʃ-im   muhim/eχmijetlik/qimmet
         I-gen **top**   read-ISH-1sg important/useful/expensive

Example (59) shows that an *-ish* phrase can be a topic.

C.2 *Mu*

-Mu ('also', 'even') can affix to a focused element (examples (61) through (63) are from Hartman (2009)):

(61)   Ötkur eqilliq, we John-mu eqilliq.
         Ötkur smart   and John-MU smart
         'Ötkur is smart, and John is also smart.'

It can also affix to a phrase containing the focused element:

(62)   min-iŋ qiz-im   eqilliq. Ötkur-niŋ qiz-i-mu   eqilliq.
         I-gen   daughter-1sg smart. Ötkur-gen daughter-3-MU smart.
         'My daughter is smart. Ötkur's daughter is also smart.'

-Mu cannot appear on an element that does not contain (or is not contained in) the target of focus:

(63)   Ötkur kitap-ni oqu-d-i,   we Ötkur-(*mu) χet-ni   oqu-d-i.
         Ötkur book-acc read-past-3, and Ötkur-(*MU) letter-acc write-past-3
         'Ötkur read a book, and Ötkur wrote a letter.'

-Mu can appear on an entire DP when the possessor is focused, as in example (62). Similarly, with non-modal adjectives *-mu* can appear on the *-ish* phrase when subject of the *-ish* phrase is focused.

Non-modal adjectives – focused subject, *-mu* on *-ish* phrase:

(64) Ötkur-nuŋ ket-iʃ-i   muhim/eχmijetlik/jaχʃi. Ajgül-niŋ-(mu) ket-iʃ-i-(mu)
Ötkur-gen leave-ISH-3 important/useful/good. Ajgül-gen-(MU) leave-ISH-3-(**MU**)
muhim/eχmijetlik/jaχʃi.
important/useful/good
'Ötkur's leaving is important/useful/good. Ajgül's leaving is also
important/useful/good.'

If the subject of the -*ish* phrase is obligatorily outside of the -ish phrase in modal constructions, we expect -*mu* not to appear on the entire -*ish* phrase when the subject is focused. That is precisely what we find.

Modal adjectives – focused subject, *-*mu* on -*ish* phrase:

(65) Ötkur-nuŋ ket-iʃ-i   kirek/lazim. Ajgül-niŋ-(mu) ket-iʃ-i-(*mu)   kirek/lazim
Ötkur-gen leave-ISH-3 necessary.   Ajgül-gen-(MU) leave-ISH-3-(***MU**) necessary
'Ötkur's leaving is necessary. Ajgül's leaving is also necessary.'

(66) Ötkur ket-iʃ-i   kirek/lazim/mumkin. Ajgül-(mu) ket-iʃ-i-(*mu)
Ötkur leave-ISH-3- nec./nec./poss..   Ajgül-(MU) leave-ISH-3-(***MU**)
kirek/lazim/mumkin.
necessary/nec./possible
'Ötkur's leaving is necessary/possible. Ajgül's leaving is also necessary/possible.'

Note also that when the object of an -*ish* phrase under a modal adjective is focused, -*mu* can appear on the -*ish* phrase.

Modal adjective – focused object, -*mu* on -*ish* phrase:

(67) Ötkur-nuŋ kitap oqu-ʃ-i   kirek.   we u-niŋ χet-(mu)   oqu-ʃ-i-(mu)
Ötkur-gen book read-ISH-3 necessary. and he-gen letter-(MU) read-ISH-3-(**MU**)
kirek.
necessary.
'Ötkur has to read a book. And he also has to read a letter.'

(68) Ötkur kitap oqu-ʃ-i   kirek.   we u χet-(mu)   oqu-ʃ-i-(mu)   kirek.
Ötkur book read-ISH-3 necessary. and he letter-(MU) read-ISH-3-(**MU**) necessary.
'Ötkur has to read a book. And he also has to read a letter.'

D   Evidence for Low Underlying Position of -*ish* Phrase Subject with Modal Adjectives

In this section, I show that modal adjectives are *raising* predicates.

Raising is possible: evidence from Negative Concord Item (NCI) licensing

Control is not possible: evidence from agreement

As shown in (69) and (70), the NCI *hitʃkim* ('nobody') requires negation in order to be licensed.

(69) hitʃkim oqu-mi-d-i
n-body read-neg-past-3
'Nobody read.'

(70) *hitʃkim oqu-d-i
n-body read-past-3

As (71) shows, an NCI subject of an -*ish* clause with *kirek* ('necessary') can be licensed by negation in the embedded predicate, regardless of case on the NCI:

Modal adjective – NCI licensed by negation on -*ish* phrase:

(71) hitʃkim-(niŋ) ket-mas-liq-i   kirek
n-body-(gen) leave-neg-LIQ-3 necessary
'It's necessary that nobody leave.'

Note that negating an -*ish* phrase results in a -*liq* phrase:[4]

(72) Ötkur-nuŋ oqu-mas-liq-i   muhim/kirek
Ötkur-gen read-neg-LIQ-3 important/necessary
'It's important/necessary for Ötkur not to read.'

NCI licensing with modal adjectives is in contrast to control predicates, for which only main clause negation licenses *hitʃkim*.

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[4]Asarina and Hartman (2010) argue that -*liq* is a complementizer that can be embedded by a null noun.

Control construction – NCI licensed by main-clause negation:

(73) Ajgül kitap oqu-ʃ-qa   tiriʃ-mi-d-i
      Ajgül book read-ISH-dat try-neg-past-3
      'Ajgül didn't try to read a book.'

(74) hitʃkim kitap oqu-ʃ-qa   tiriʃ-mi-d-i
      n-body book read-ISH-dat try-neg-past-3
      'Nobody tried to read a book.'

Control construction – NCI not licensed by negation on -*ish* phrase:

(75) Ajgül kitap oqu-mas-liq-qa   tiriʃ-t-i
      Ajgül book read-neg-LIQ-dat try-past-3
      'Ajgül tried not to read a book.'

(76) *hitʃkim kitap oqu-mas-liq-qa   tiriʃ-t-i
      n-body book read-neg-LIQ-dat try-past-3

This shows that a raising structure with modal adjectives is available. Agreement properties of the -*ish* phrase suggest that a control structure is not available. In particular, agreement on the -*ish* phrase under a modal adjective is required with 1st and 2nd person subjects.

Modal adjective – agreement on -*ish* phrase required:

(77) men-(iŋ) kitap oqu-ʃ-*(im)   kirek
      I-(gen) book read-ISH-***(1sg)** necessary
      'It's necessary for me to read a book.'

By contrast, an -*ish* phrase under a control predicate does not show any agreement marking.

Control construction – agreement on -*ish* phrase prohibited:

(78) men kitap oqu-ʃ-(*im)-ni   ojli-wat-i-men
      I   book read-ISH-(*1sg)-acc want-prog-imp-1sg
      'I want to read a book.'

(79) men kitap oqu-ʃ-(*im)-qa   tiriʃ-t-im
      I   book read-ISH-(*1sg)-dat try-past-1sg
      'I tried to read a book.'

Thus in modal adjective constructions:

- NCI's are licensed by negation on -*ish* phrase: **raising is possible**
- agreement with 1st/2nd person subjects is required on -*ish* phrase: **control is not possible**