

Genitive Subject Licensing in Uyghur Subordinate Clauses

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Abstract

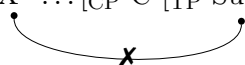
In this paper, we analyze certain embedded clauses in Uyghur, a Turkic language spoken in the Xinjiang Uyghur Autonomous Region of China. We argue i) that genitive case on the subjects of these clauses is licensed by agreement with a clause-external head, and ii) that these clauses are full CPs. Putting these two claims together, we have evidence that Uyghur exhibits agreement and case-assignment over a CP boundary, a configuration that is incompatible with Chomsky’s (1998) strong version of the Phase Impenetrability Condition (PIC). We conclude that the Uyghur data support adopting the weaker version of the PIC proposed by Chomsky (2001).

1 Introduction

Much work in the minimalist tradition has sought to derive locality conditions from the properties of phased derivations, but the actual formulation of phase-based constraints varies widely. The most influential proposal of this sort, Chomsky’s (1998 et seq.) Phase Impenetrability Condition (PIC), exists in two versions, given in (1). These two versions differ in their empirical predictions, and this paper brings data from Uyghur to bear on the choice between them.¹

- (1) a. Chomsky’s (1998) Phase Impenetrability Condition (PIC_{strong}):
In phase α with head H, the domain of H is not accessible to operations outside α , only H and its edge are accessible to such operations.
- b. Chomsky’s (2001) Phase Impenetrability Condition (PIC_{weak}):
In phase α with head H, the domain of H is accessible to operations outside α only until the next (strong) phase head is merged.

The predictions of PIC_{strong} and PIC_{weak} differ in the case where exactly one phase head intervenes between an Agreement probe and its goal. Consider, for instance, a configuration where $\alpha = \text{CP}$, $H = C$, and the domain of $H = \text{TP}$. While PIC_{strong} predicts that the subject inside TP is not accessible to a CP-external head, PIC_{weak} predicts that the subject inside TP *is* accessible to a CP-external head, as long as no other (strong) phase head intervenes. The predictions are illustrated below:

- (2) Predicted by PIC_{strong}:
 $X^0 \dots [\text{CP } C [\text{TP } \text{Subj } \dots]]$


¹The formulations given here are reworded from Chomsky (1998, 2001) for clarity and ease of comparison.

- (3) Predicted by PIC_{weak}:
 $X^0 \dots [_{CP} C [_{TP} \text{Subj} \dots]]$
-

We will argue that the configuration above is instantiated by agreement with genitive embedded subjects in Uyghur, the construction illustrated in (4)²:

- (4) Agreement across a CP boundary in Uyghur:
 [**men-ij** ket-ken-(liq)] heqiqet-**im** muhim
 [**I-gen** leave-RAN-(LIQ)] fact-**1sg.poss** important
 ‘The fact that I left is important.’

To show that examples like (4) truly exemplify the configuration above, we must establish: a) the existence of an agreement relation between the embedded subject and a clause-external head; and b) the existence of a phasal projection (CP) in the embedded clause. We take these two claims up in turn. In section 2, we show that the embedded subject agrees with a clause-external head—namely, the functional head in the nominal projection that licenses genitive case. In section 3, we show that the embedded clause is indeed a full CP. In section 4, we discuss the theoretical applications of the Uyghur data and argue against some alternative analyses of these facts. Section 5 concludes.

2 Genitive subjects agree with a clause-external head

Let us consider Uyghur constructions where a clause is subordinated to a noun. In these examples, the embedded subject takes genitive case, and controls possessor agreement on the clause-external head noun. This is illustrated in example (5) for a relative clause and example (6) for a complement clause.

- (5) Relative clause – agreement on head noun:
 [**Ötkür-nij** oqu-**van**] kitav-**i** uzun
 [**Ötkür-gen** read-RAN] book-**3.poss** long
 ‘The book that Ötkür read is long.’
- (6) Noun complement – agreement on head noun:
 [**Ötkür-nij** tamaq ji-gen-(liq)] ifaret-**i** muhim
 [**Ötkür-gen** food eat-RAN-(LIQ)] sign-**3.poss** important
 ‘The sign that Ötkür ate food is important.’

Agreement with the embedded subject is crucially tied to the licensing of genitive case. Uyghur also allows unmarked embedded subjects³, and these do not trigger possessor agreement on the head noun, as illustrated for the relative clause in (7).

- (7) Relative clause with unmarked subject – no agreement on head noun:
 [**Ötkür** oqu-**van**] kitap-**(*i)** uzun
 [**Ötkür** read-RAN] book-**(*3.poss)** long
 ‘The book that Ötkür read is long.’

²The Uyghur data in this paper comes from the authors’ fieldwork. Genitive subjects and the corresponding possessor agreement morphemes are bolded throughout, where relevant.

³With a few exceptions, unmarked subjects of relative clauses and overtly-headed noun complement clauses are in free variation with genitive subjects.

Furthermore, it appears that genitive embedded subjects are licensed by the same head that licenses clause-external genitive possessors. There is complementary distribution between possessors and genitive subjects of relative clauses; we propose that the complementarity arises because a single nominal projection cannot assign genitive twice. As (8) suggests, there would be nothing semantically anomalous about doubled possessors. However, (9) shows that two possessors are syntactically impossible: there is no way for both to be case-licensed.

- (8) Two meanings for possessors:

Ajgül-nuŋ resim-i

Aygül-gen picture-**3.poss**

‘picture that belongs to Aygül’ *or*

‘picture that depicts Aygül’

- (9) But no double possessors:

* **Ötkür-niŋ** **Ajgül-nuŋ** resim-i

Ötkür-gen **Aygül-gen** picture-**3.poss**

intended: ‘picture that depicts Aygül and belongs to Ötkür’

We find the same effect with genitive-marked subjects: they are in complementary distribution with genitive-marked possessors. This contrasts with *unmarked* embedded subjects, which are compatible with possessors, as shown below:

- (10) Possessed head noun – relative clause subject must be unmarked:

a. [**Ötkür** oqu-**ɞan**] **Ajgül-nuŋ** kitav-i uzun

[**Ötkür** read-RAN] **Aygül-gen** book-**3.poss** long

‘Aygül’s book that Ötkür read is long.’

b. * [**Ötkür-niŋ** oqu-**ɞan**] **Ajgül-nuŋ** kitav-i uzun

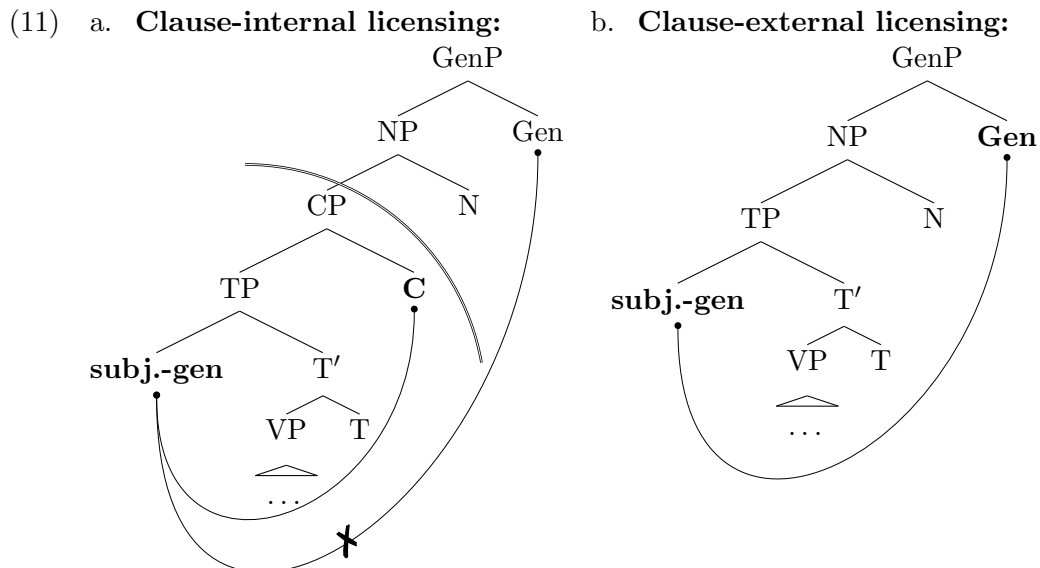
[**Ötkür-gen** read-RAN] **Aygül-gen** book-**3.poss** long

intended: ‘Aygül’s book that Ötkür read is long.’

In sum, then, we have strong evidence that genitive subjects in Uyghur agree with a clause-external nominal head. This phenomenon of clause-external licensing has received much attention in recent work on Altaic genitive subjects (Miyagawa ms. 2006, 2008, 2011; Kornfilt 2008). In the next section, we begin by briefly presenting the analysis of clause-external licensing proposed by these authors, and we then show that the Uyghur facts argue against this analysis.

3 The embedded clauses are full CPs

On the analyses of Miyagawa and Kornfilt, clause-external licensing requires the absence of a CP layer in the embedded clause. That is because these analyses tacitly assume PIC_{strong} , which permits agreement with a clause-external head only if there is no phasal projection intervening. Clause-external licensing is therefore predicted to obtain only when the embedded clause is reduced (TP/AspP). By contrast, clause-internal licensing of genitive subjects obtains when the embedded clause is a full CP. This is illustrated in (11); we label the clause-external head that agrees with the embedded subject and licenses genitive case as “Gen”.



In the remainder of this section we argue, contra Miyagawa and Kornfilt, that the embedded clauses in Uyghur are not reduced. They are full CPs, and the observed agreement configuration constitutes a true challenge to $\text{PIC}_{\text{strong}}$. We provide three arguments for the existence of a CP layer. In section 3.1, we argue that these clauses can contain an overt complementizer, *-liq*. In section 3.2, we show that these clauses can host adverbs that adjoin at the CP level. Finally, in section 3.3, we present an argument from the availability of embedded *wh*-questions in these clauses, following proposals that the CP layer encodes interrogative force (Rizzi 1997) and provides a landing site for *wh*-movement (Stowell 1982). Miyagawa (2011) argues that Japanese genitive-subject clauses are reduced (TPs, rather than CPs), and we show that Uyghur genitive-subject clauses pattern differently from Japanese on these tests.

3.1 *-liq* is a complementizer

As shown in examples (4) and (6) above, complex NPs in Uyghur feature the morpheme *-liq*, which appears optionally at the right edge of the embedded clause. This is illustrated again in (12).

- (12) Optional *-liq* on noun complement (= 6):
 [Ötkür-niñ tamaq ji-gen-(**liq**)] ifaret-i muhim
 [Ötkür-gen food eat-RAN-(**LIQ**)] sign-3.poss important
 ‘The sign that Ötkür ate food is important.’

We propose that *-liq* is a complementizer that heads the embedded clause. After showing that the alternative analysis of *-liq* as a nominalizer fails for empirical reasons, we observe that *-liq* exhibits distributional properties (optionality, sensitivity to the type of embedded clause) characteristic of a complementizer.

3.1.1 Why *-liq* is not a nominalizer

Some traditional grammars, as well as some recent generative work (see Gribanova (2010) for Uzbek), have analyzed *-liq* and its cognates as a nominalizer of embedded clauses, based on clausal complements of the sort illustrated in (13):

- (13) Verb complement:
 Ötkür [Ajgül-nuɣ ket-ken-(**lik**)-i-ni] di-d-i
 Ötkür [Aygül-gen leave-RAN-(**LIQ**)-3.poss-acc] say-past-3
 ‘Ötkür said that Aygül left.’

From examples like (13), the appeal of the nominalizer analysis is understandable: the embedded clause is nominal, as evidenced by the nominal morphology (possessor agreement and case-marking) it bears.⁴ The question, then, is whether *-liq* is the morpheme responsible for the nominal nature of the embedded clause. Asarina and Hartman (2011) argue that the clause in (13) is embedded by a phonologically null head noun, which is the true host of the possessor agreement and case-marking. (For similar proposals, see Lees (1965); Aygen (2002) for Turkish; Maki and Uchibori (2008) for Japanese.) On this analysis, *-liq* simply heads the clause and does not create a nominal category.

- (14) Null noun analysis of (13):
 Ötkür [_{CP} Ajgül-nuɣ ket-ken-(**lik**)] ∅_N-i-ni di-d-i
 Ötkür [_{CP} Aygül-gen leave-RAN-(**C**)] ∅_N-3.poss-acc say-past-3
 ‘Ötkür said that Aygül left.’

Looking only at examples like (13), it is hard to distinguish the predictions of a “nominalizer” hypothesis from those of the “complementizer + null head noun” hypothesis. However, in examples where the head noun is overt (as in (15)), we find evidence against the former and in favor of the latter.

- (15) Agreement on head noun (= 12):
 [**Ötkür-niɣ** tamaq ji-gen-(liq)] ifaret-**i** muhim
 [**Ötkür-gen** food eat-RAN-(LIQ)] sign-**3.poss** important
 ‘The sign that Ötkür ate food is important.’

(15) shows that when the clausal complement is embedded by an overt head noun, possessor agreement appears on the head noun rather than on the *-liq*-clause. (16) illustrates that the *-liq*-clause can never bear possessor agreement in complements to overt nouns.

- (16) No agreement on *-liq*:
 * [**Ötkür-niɣ** tamaq ji-gen-(liq)-**i**] ifaret-(i) muhim
 [**Ötkür-gen** food eat-RAN-(LIQ)-**3.poss**] sign-(3.poss) important
 intended: ‘The sign that Ötkür ate food is important.’

If *-liq* is a complementizer, the pattern in (15) and (16) is expected. The *-liq*-clause does not host nominal morphology because it is not actually a nominal category—it merely appeared to be nominal in (13) because its embedding noun was null. The nominalizer analysis, on the other hand,

⁴The initial plausibility of the nominalizer analysis of *-liq* is compounded by the fact that Uyghur has a homophonous morpheme, which is a categorially flexible derivational suffix that can be (but often is not) a nominalizer:

- (i) a. tʃatʃ ‘hair’, tʃatʃ-laɣ ‘hairy’
 b. Türikije ‘Turkey’, Türikije-liq, ‘Turkish’
 c. xufal ‘happy’, xufal-laɣ ‘happiness’
 d. kent ‘village’, kent-liq ‘villager’

See section 3.1.2 below for a relevant difference between these two morphemes (optionality).

predicts a pattern that is the opposite of (15) and (16): if *-liq* reliably creates a nominal category, the *-liq*-clause should host possessor agreement just as it does in (13).

We conclude that *-liq* does not nominalize embedded clauses. Rather, it *heads* clauses that are embedded by (possibly null) nouns. Next we highlight two further properties of *-liq* that corroborate its status as a complementizer.

3.1.2 Optionality

As the previous examples have illustrated, when *-liq* is available, it is generally optional (or optionally null). Our consultant identifies no difference in meaning for minimal pairs with and without *-liq*. Such optionality is common for complementizers—many languages have null complementizers or allow complementizer-drop (see Stowell (1981); Pesetsky and Torrego (2001); Boškovic and Lasnik (2003); Kishimoto (2006) for discussion). To our knowledge, there are no examples of systematic optionality for a piece of category-changing derivational morphology such as a nominalizer. Indeed, one crucial difference between *-liq* the complementizer and *-liq* the derivational suffix is that the latter *cannot* be optionally null.

3.1.3 Noun complements vs. relative clauses

The complementizer *-liq* is sensitive to the type of embedded clause: it is available in complement clauses, but is unavailable with relative clauses, as shown in (17) and (18).

- (17) *-liq* in a noun complement clause:
 [Tursun-niŋ ket-ken-(**liq**)] heqiqet-i muhim
 [Tursun-gen leave-RAN-(**LIQ**)] fact-3sg important
 ‘The fact that Tursun left is important.’

- (18) No *-liq* in a relative clause:
 [Ötkür-niŋ oqu-Ɔan-(***liq**)] kitav-i uzun
 [Ötkür-gen read-RAN-(***liq**)] book-3.poss long
 ‘The book that Ötkür read is long.’

It is crosslinguistically common to observe different complementizer possibilities for different types of embedded clauses (see, e.g., Hiraiwa (2000) for Japanese *to* vs. \emptyset , and Richards (1999) for related discussion of Tagalog and English), and it appears this is what we find in the distribution of Uyghur *-liq*. Although the implementation is not crucial to our analysis, we will assume for the sake of concreteness that Uyghur has two complementizers, *-liq* and \emptyset , which embed clauses of the type we have been discussing.⁵ Complement clauses can be headed by either *-liq* or \emptyset , while relative clauses can only be headed by \emptyset .

This subsection has argued that genitive-subject embedded clauses in Uyghur are headed by a complementizer, which can often be overt.⁶ The next two subsections show that these clauses behave like full CPs in other ways.

⁵Outside the scope of this paper is another complementizer, *dep*, which introduces true clausal complements to verbs, and embeds fully tensed TPs.

⁶This argument is likely replicable for at least two closely related Turkic languages: in Kazakh ((i) and (ii); authors’ fieldwork) and Uzbek ((iii); Vera Gribanova (p.c.)), which both have clause-external licensing, agreement can occur across an element that is plausibly cognate to Uyghur *-liq*:

3.2 CP-level adverbs

Miyagawa (2011) examines the Japanese *-ga/-no* paradigm, and argues for a clause-external licensing approach to genitive subjects in Japanese. He claims that embedded clauses with nominative (NOM) subjects are CPs, while embedded clauses with genitive (GEN) subjects are reduced (TPs). To support this claim, Miyagawa (2011) observes that CP-level adverbs (e.g., ‘evidently’, ‘truly’, ‘fortunately’ (Cinque 1999)) are compatible with NOM-subject relative clauses, but not with GEN-subject relative clauses, as shown in (19). The same observation extends to noun complement clauses, as (20) illustrates. This contrasts with lower (TP-level) adverbs, which are compatible with both NOM- and GEN- subject embedded clauses.

- (19) CP-level adverb with NOM subject only (relative clause):

[**saiwai-ni** Taroo-**ga**/***no** yonda] hon
 [**fortunately** Taro-**nom**/***gen** read] book
 ‘the book that Taro fortunately read’ (*Japanese*) (Miyagawa 2011: (26a))

- (20) CP-level adverb with NOM subject only (complement clause):

John-wa [kinoo **saiwainimo** Mary-**ga**/**?*no** kita koto]-o shir-anai
 John-top [yesterday **fortunately** Mary-**nom**/**?*gen** came fact]-acc know-neg
 ‘John doesn’t know (the fact) that Mary fortunately came yesterday.’ (*Japanese*) (Yasudata Sudo (p.c.))

We can extend Miyagawa’s test to diagnose the size of embedded clauses in Turkish and Uyghur. For Turkish, a clause-internal licensing language, the prediction is that CP level adverbs should be compatible with GEN-subject embedded clauses. This prediction is borne out, as (21) illustrates:

- (21) CP-level adverb with GEN subject:

[**anlaşılan** öğrenci-ler-**in** oku-duk-ları] kitap
 [**evidently** student-pl-**gen** read-DIK-3.pl] book
 ‘the book which the students evidently read’ (*Turkish*) (Jaklin Kornfilt (p.c.))

Using Turkish and Japanese as controls, we can use Miyagawa’s test to diagnose the size of the embedded clause in Uyghur. If Uyghur GEN-subject embedded clauses are full CPs, then Uyghur should pattern like Turkish (and unlike Japanese) and allow CP-level adverbs in these clauses. Examples (22) and (23) demonstrate that Uyghur embedded clauses indeed permit CP-level adverbs.⁷

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- (i) Kazakh:
 jarʒan mjenıŋ kjet-ip qal-ɾan-(**dıɾ**)-im-di ajtti
 Yarzhan I-gen leave-IP do-RAN-(**DIK**)-1sg-acc said
 ‘Yarzhan said that I left.’
- (ii) Agreement on external noun in Kazakh:
 [**jarʒan-nıŋ** kor-gen] qız-ı ajdemi
 [**Yarzhan-gen** see-RAN] girl-3 beautiful
 The girl Yarzhan saw is beautiful.
- (iii) Uzbek:
 men farhodning kitob o’qish(**lig**)ini bilaman.
 I Farhod.gen book read-ISH.(**LIG**).3sg[poss].acc know.1sg
 ‘I know about Farhod’s reading a book.’

We must leave these cross-linguistic comparisons for further research.

⁷It is difficult to find CP-level adverbials in Uyghur that are unambiguously adverbs, rather than parenthetical phrases, which have a freer distribution. Both *evidently* and *unfortunately* were rendered by our consultant as phrasal elements.

- (22) CP-level adverb with GEN subject (relative clause):
 [**xeqiqi** Ajgül-**nuŋ** jaz-**ɞan**] kitiv-i-ni korset!
 [**truly** Aygül-**gen** write-RAN] book-3.poss-acc show
 ‘Show (me) the book that Aygül truly wrote!’
- (23) CP-level adverb with GEN subject (complement clause):
xeqiqi sen-**iŋ** ket-ken-lik-iŋ-ni bil-i-men
truly you-**gen** leave-RAN-LIQ-2sg.poss-acc know-impf-1sg
 ‘**I know that you truly left.**’
 ‘I truly know that you left.’

We thus have further evidence that Uyghur embedded clauses contain a CP layer.

3.3 Embedded interrogatives

Stowell (1982) shows that clauses without a CP layer (such as English gerunds) cannot host wh-questions. If Uyghur genitive-subject clauses were TPs/AspPs, we would thus expect them not to host wh-questions. On the other hand, a full CP clause would allow embedded wh-questions, and this is what we see in (24):

- (24) Embedded interrogatives with GEN subjects:
- a. men [Ötkür-**niŋ** **qatfan** kel-idi-**ɞan**-(liq)-i-ni] bil-i-men
 I [Ötkür-**gen** **when** come-impf-RAN-(LIQ)-3.poss-acc] know-impf-1sg
 ‘I know when Ötkür will come.’
- b. men [Ajgul-**nuŋ** **katfan** ket-ken-(lik)] heqiqet-i-ni sordum
 I [Aygül-**gen** **when** leave-RAN-(LIQ)] fact-3.poss-acc asked
 ‘I asked when Aygül left.’

Following Miyagawa’s (2011) proposal that genitive-subject clauses in Japanese are not full CPs, we predict that an embedded question in Japanese will require a nominative subject. This prediction is borne out in (26) (suggested to us by Shigeru Miyagawa (p.c.)).⁸

- (25) Embedded statement:
 John-**ga**/??**no** odoru to yuu koto-ga mondai-ni natta.
 John-**nom/gen** dance C KOTO-nom problem became.
 ‘The fact that John will dance has become a problem.’ (*Japanese*)
- (26) Embedded question:
 John-**ga**/***no** odoru **ka** to yuu koto-ga mondai-ni natta.
 John-**nom**/***gen** dance **Q** C KOTO-nom problem became
 ‘The issue of whether John will dance has become a problem.’ (*Japanese*)

We thus have another piece of evidence that genitive-subject embedded clauses in Uyghur are CPs, and not TPs/AspPs.

⁸Unfortunately, confounding factors make the genitive subject in the declarative example in (25) degraded as well. Speakers detect a contrast between the genitives in (25) and (26), but the judgment is subtle.

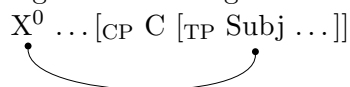
3.4 Summary

In this section, we have presented three strands of evidence that genitive-subject embedded clauses in Uyghur are full CPs. First, we showed that these clauses can host what by all appearances is an overt complementizer, *-liq*. Second, we showed that Miyagawa’s (2011) adverb test for the size of the embedded clause reveals that Uyghur genitive-subject embedded clauses pattern as full CPs (as in Turkish), rather than as TPs (as in Japanese). Third, we noted that Uyghur genitive-subject clauses can be interrogatives (unlike Japanese genitive-subject clauses), which again suggests the presence of a CP layer.

4 Discussion and Implications

The preceding discussion has established two points about genitive embedded subjects in Uyghur: they are dominated by a CP, and they Agree with a nominal head outside this CP. In other words, we have established that Uyghur exhibits the Agreement configuration in (3), repeated in (27).

(27) Agreement with genitive subjects in Uyghur:



The special interest of this configuration, as explained in section 1, is that it illustrates the availability of Agreement across a single phase head—a result that is incompatible with the strong version of the Phase Impenetrability Condition given in (28a), but predicted by the weaker version given in (28b). We conclude that Uyghur genitive subjects provide an empirical argument against the former and in favor of the latter.

(28) a. Chomsky’s (1998) Phase Impenetrability Condition (PIC_{strong}):

In phase α with head H, the domain of H is not accessible to operations outside α , only H and its edge are accessible to such operations.

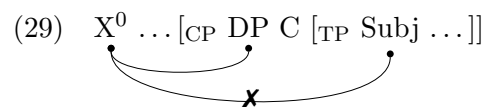
b. Chomsky’s (2001) Phase Impenetrability Condition (PIC_{weak}):

In phase α with head H, the domain of H is accessible to operations outside α only until the next (strong) phase head is merged.

In the remainder of this section we consider, and reject, two alternative explanations for the Uyghur facts. Section 4.1 assesses the possibility that genitive subjects in Uyghur are at the edge of CP, and therefore accessible to Agreement with the external head even under PIC_{strong} . Section 4.2 argues against an attempt to salvage PIC_{strong} by branding *-liq* as a “defective” C^0 —i.e., one that does not count as a “strong phase head”. Section 4.3 recapitulates our account of the Uyghur facts, using PIC_{weak} .

4.1 Accessibility at the phase edge: not a solution for Uyghur

Does the configuration of agreement and genitive case assignment in Uyghur necessarily violate the PIC_{strong} ? For several languages that show clause-external agreement patterns, it has been proposed that the DP agreed with is in fact at the *edge* of the embedded CP (Polinsky and Potsdam (2001) for Tsez; Branigan and MacKenzie (2002) for Innu-aimûn; Şener (2008) for Turkish). Under this configuration, the PIC_{strong} is not actually violated, as illustrated in (29).



Uyghur genitive subjects do not obligatorily occupy a CP-edge position overtly. For example, they can be preceded in the clause by locative adverbial phrases, as shown in (30).

- (30) Genitive subject preceded by locative:
 [soʁun-da Mehemmet-niŋ oqu-ɞan] kitav-i uzun
 [party-loc Mehemmet-gen read-RAN] book-3.poss long
 ‘The book that Mehemmet read at the party is long.’

However, it has been proposed that *topics* move to the edge of CP, sometimes covertly. Consequently, agreement with embedded topics can cross a CP boundary without violating the PIC_{strong}. If the embedded DP is not a topic, clause-external agreement or case-licensing is impossible. This pattern is illustrated for Turkish in (31) and (32). (See also Polinsky and Potsdam (2001) for a similar phenomenon in Tsez, and Branigan and MacKenzie (2002) for Innu-aimûn.)

- (31) Turkish ECM:
 Pelin [**Mete-yi** istakoz-dan ye-di diye] duy-muş.
 Pelin-nom [**Mete-acc** lobster-abl eat-past C] hear-evid.past
 ‘Pelin heard that Mete ate from the lobster.’ (*Turkish*, Şener 2008: (49b))

- (32) Turkish ECM – embedded subject is a topic and cannot be focused:
 Pelin [yalnızca **Sinan-{\emptyset/#ı}** git-ti diye] duy-muş.
 Pelin [only **Sinan-{\nom/#acc}** go-past C] hear-evid.past
 ‘Pelin heard that only *Sinan* went (to the party).’ (*Turkish*, Şener 2008: (48))

If Uyghur genitive subjects were moving covertly to the edge of CP, we might expect them to display the topichood restriction illustrated above. However, Uyghur genitive subjects need not be topics. As illustrated below, they may be focused, unlike the accusative-marked subject in (32).

- (33) Non-topic genitive subjects:
 a. [Ötkür-niŋ-la kel-gen-lik] ɣever-i muhim
 [Ötkür-gen-only come-RAN-LIQ] news-3.poss important
 ‘The news that only *Ötkür* came is important.’
 b. [men-iŋ-la jaɣfi kör-gen] kitav-im uzun
 [I-only well see-RAN] book-1sg.poss long
 ‘The book that only *I* like is long.’
 c. Q: Ötkür [Aɣgül-nuŋ kel-gen-lik-i-ni] didi-mu?
 Ötkür [Aɣgül-gen come-RAN-LIQ-3.poss-acc] said-Q
 ‘Did *Ötkür* say that *Aygül* came?’
 A: Yaq, Ötkür [Mehemmet-niŋ kel-gen-lik-i-ni] didi.
 no, Ötkür [Mehemmet-gen come-RAN-LIQ-3.poss-acc] said
 ‘No, *Ötkür* said that *Mehemmet* came.’

We conclude that there is no evidence to support the idea that Uyghur genitive subjects are at the edge of CP either overtly (which would result in word order effects) or covertly (which should yield discourse effects).

4.2 *-liq* is not “defective” C

Since Chomsky (2001), many contributions to phase theory have relied on a notion of *defectivity* to encode exceptions to PIC_{strong}. Defective phasal categories are taken to head “weak” phases,

which are transparent to the operations of a higher head. Defective v is commonly assumed for passives and unaccusatives—hence the “weak” vP phase that allows A-movement out of the verbal projection. Defective C^0 , while not widely assumed, has been the subject of several recent proposals (Sabel 2006; Gallego 2007; Gallego and Uriagereka 2007; Fortuny 2008; Richards 2007, to appear; Wenger 2009), often accompanied by conceptual motivations. Empirical evidence has been scant, though see Carstens and Diercks (to appear) for Lubukusu (Bantu) and Martins and Nunes (2010) for Brazilian Portuguese.

In the context of our present argument, the prospect of defective C^0 allows a possible escape from our conclusion. We have shown that Uyghur exhibits Agreement across a CP, but if $-liq$ is defective and the embedded CP can be considered a weak phase, then the Uyghur facts could be reconciled with PIC_{strong} . However, Asarina (under review) provides empirical evidence against treating $-liq$ as defective. Examining locality in Uyghur raising constructions, Asarina shows that $-liq$ phrases *do* behave as strong phases. Embedded subjects cannot raise out of a $-liq$ -clause, as illustrated below with the raising adjective *kirek* (‘necessary’). Asarina proposes that the PIC is what rules out (35), in contrast with (34).⁹

(34) Raising out of specifier of vP permitted:

Ötkür-(niñ) bu ehtimalda [_{vP} [_{vP} t [_{v'} oqu]]-f-i kirek]
 Ötkür-(gen) probably [_{vP} [_{vP} t [_{v'} read]]-nliz-3.poss necessary]

‘Ötkür has to read.’

(35) Raising out of $-liq$ CP prohibited:

* Ötkür-(niñ) [_{vP} [_{CP} t oqu-wat-qan-liq]-i kirek]
 Ötkür-(gen) [_{vP} [_{CP} t read-prog-RAN-C]-3.poss necessary]

intended: ‘Ötkür has to be reading (right now).’

The matrix adverb *bu ehtimalda* (‘probably’) in (34) demonstrates that the embedded subject moves out of the embedded clause. (See Asarina (under review) for evidence that raising is in fact obligatory in (34).) (35) is ruled out because raising from a full CP clause is blocked. Since the $-liq$ -phrase in (35) *does* block raising, we cannot say that $-liq$ is simply a “defective” C. Rather, we must find the relevant structural difference between the Agree configuration responsible for raising across $-liq$ in (35) (prohibited), and the Agree configuration responsible for genitive case assignment across $-liq$ in (4) (permitted). In the following section, we show that the PIC_{weak} —without invoking defectivity—captures the relevant distinction: in the latter configuration, Agree applies across one phasal category, while in the former configuration, Agree must apply across two.

4.3 PIC_{weak} makes the correct predictions

Let us now apply the PIC_{weak} (repeated in (36)) to the data we have seen so far, and see how it successfully distinguishes the examples where Agreement into a $-liq$ -clause is permitted from those where it is disallowed.

⁹Note that a $-liq$ -phrase *can* be embedded under a non-raising predicative adjective, as in (i):

- (i) $-liq$ -phrase under a non-raising predicative adjective:
 Mehemmet-niñ oqu-wat-qan-liq-i muhim
 Mehemmet-gen read-prog-RAN-C-3.poss important
 ‘Mehemmet reading (right now) is important.’

(36) Chomsky’s (2001) Phase Impenetrability Condition (PIC_{weak}):

In phase α with head H , the domain of H is accessible to operations outside α only until the next (strong) phase head is merged.

As discussed above, *-liq* CPs are not “defective”. In fact, we are following Chomsky (2001) in taking the phasal categories to be C and v , but we are eschewing the notion of “defectivity”: there are no “weak” phases.¹⁰ Once PIC_{weak} is adopted, raising v can be analyzed as a “strong” phase, and in fact *must* be if the PIC is to be retained as the principle that rules out (37b).

- (37) a. John [_{vP} seems t to be happy.]
 b. * John [_{vP} seems [_{CP} that t is happy.]]
-

In effect, PIC_{weak} ensures that Agree can apply across one phase head, but not two. The predictions made by PIC_{weak} for the constructions under consideration are illustrated in (38).

- (38) a. Genitive subject licensing:
 Gen [_{CP} Subj]
 b. Raising out of TP:
 T [_{vP} Subj]
 c. Raising out of CP:
 T [_{vP} [_{CP} Subj]]
-

For our central case of genitive subjects, the Agree probe is a Gen^0 head.¹¹ Only one phase head (C^0) intervenes between the Agreement probe and its goal, so PIC_{weak} correctly predicts that Agreement into embedded CP is possible.

The Uyghur raising examples presented above pattern just like the English raising examples in (37). In (35), the Agree probe is matrix T^0 . Two phase heads (C^0 and matrix v^0) intervene between matrix T^0 and the embedded subject, so PIC_{weak} correctly predicts that the embedded subject is not accessible. In (34), the good case of raising, the Agree probe is still T^0 , but there is no C^0 head in the embedded clause. In this case, only one phase head (matrix v^0) intervenes between matrix T^0 and the embedded subject, so PIC_{weak} correctly predicts that the embedded subject is accessible.

¹⁰In this regard, our proposal supports the conclusion of Legate (2003), who argues against weak phasehood for passive and unaccusative v , based on semantic and phonological properties. Chomsky (2001), while endorsing PIC_{weak} , crucially retains the notion of weak phase. Weak phases might seem to be necessary to allow for long-distance raising over multiple v heads, in cases like (ia). However, many authors have convincingly argued that such examples involve a series of local movements (see Bošković (2002) and references therein). We think it is plausible that a similar successive-cyclic operation accounts for agreement without movement in the expletive construction in (ib), although we remain neutral regarding the technical implementation.

- (i) a. They appear to be likely to be defeated t_{they} .
 b. There appear to be likely to be some problems.

¹¹We assume that genitive case is assigned by a functional projection below D. It would be possible for D itself to be the case assigner, so long as DP is not a (syntactic) phase. (Matushansky 2005; Richards 2006; Sabbagh 2007; Gallego 2009)

4.4 Variation within Altaic

Our analysis has consequences for the cross-linguistic variation in the licensing of genitive embedded subjects in Altaic. Recall that on the analyses of Miyagawa (ms. 2006, 2008, 2011) and Kornfilt (2008), the difference between clause-internal licensing and clause-external licensing corresponds to a difference in the size of the embedded clause. If our analysis is correct, this correspondence does not hold: there is at least one Altaic language (Uyghur) where genitive embedded subjects are licensed clause-externally, but the embedded clause is a full CP. (In fact, as noted in section 3.1, there is preliminary evidence that some other Turkic languages, including at least Uzbek and Kazakh, pattern with Uyghur in displaying clause-external licensing for genitive subjects inside full CPs.)

Here a new question arises: If the choice between clause-internal and clause-external licensing does not depend on the size of the embedded clause, what *does* it depend on? We propose that this choice can be reduced to a lexical property of C^0 : Turkish C^0 assigns genitive case (Kornfilt 2008), whereas Uyghur C^0 does not. Thus, what blocks genitive case assignment by an external head in Turkish is not the CP boundary itself, but the fact that the embedded subject is assigned genitive case by C^0 and may not be assigned genitive case again by a higher head. The contrast between Turkish and Uyghur therefore derives from a language-specific lexical property of C^0 , rather than from a difference in the size of the embedded clause.¹²

5 Conclusion

This paper has analyzed Agreement with genitive embedded subjects in Uyghur. We began by establishing i) that the genitive subject Agrees with a clause-external head, and ii) that the genitive subject is embedded within a CP. We then discussed a theoretical consequence of these facts: Uyghur displays Agreement (and case-assignment) across a phase head, a configuration that is inconsistent with the strong version of the Phase Impenetrability Condition proposed in Chomsky (1998), but consistent with a weaker version suggested in Chomsky (2001). We concluded that the weak version of the PIC offers both a better empirical treatment of the Uyghur facts, and the conceptual advantage of dispensing with “defective” phases.

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¹²A similar approach, which also derives cross-linguistic variation from the lexical properties of C^0 , is suggested by Miyagawa (2011), who assumes PIC_{strong} , but proposes that strong phasehood is tied to case-licensing ability.

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