Indexical Shifting in Uyghur and the Syntax of Monsters^{*}

Kirill Shklovsky and Yasutada Sudo

MIT

1. Introduction

Every natural language has words and phrases whose meanings refer to certain aspects of the context of utterance (e.g. *I, you, here, now*, etc.). These items are usually called *indexicals*. Kaplan (1977) made an important observation that the interpretation of indexicals is insensitive to modals, unlike that of definite descriptions. For example, the indexicals in (1) are obligatorily interpreted relative to the context of the current utterance, despite the fact that they are in modal contexts:

- (1) a. If **I** were a phonologist, **I** would work on tones
 - b. John thought that **today** is Sunday

This rigidity of reference led Kaplan to conjecture that indexicals are always dependent on the actual context of utterance. In other words, he claimed there is no operator in natural language that shifts the context. He called such supposedly non-existing context-shifting operators *monsters*. To put it differently, if a monster did exist, indexicals under its scope would be interpreted relative to non-actual contexts and hence *I* could refer to somebody other than the speaker. We refer to such a phenomenon as *indexical shifting*.

Contrary to Kaplan's (1977) surmise, however, a number of recent studies demonstrate that many languages, including Amharic (Schlenker, 1999, 2003), Navajo (Speas, 1999, Schlenker, 1999), Zazaki and Slave (Anand and Nevins, 2004, Anand, 2006), Catalan

^{*}Many thanks to Alya Asarina, Amy Rose Deal, Rose-Marie Déchaine, Danny Fox, Martin Hackl, Claire Halpert, Irene Heim, Sabine Iatridou, Makoto Kanazawa, Yusuke Kubota, David Pesetsky, Norvin Richards, Andrew Nevins, David Oshima, Philippe Schlenker, Chris Tancredi, Wataru Uegaki, Martina Wiltschko, and the audiences of NELS 40, MIT Syntax-Semantics Workshop 2009, and the MIT LF Reading Group for many helpful discussions and insightful suggestions. We also gratefully acknowledge the help and patience of Mettursun Bedulla, without whom this project would not have been possible. All the errors are the authors' own.

Sign Language (Quer, 2005), Nez Perce (Deal, 2008) and Matses (Fleck et al., 2009) seem to exhibit indexical shifting. Based on this, several authors including Schlenker (1999, 2003), Anand and Nevins (2004) and Anand (2006) have proposed that monsters do exist at least in certain languages.

In this paper we present novel data showing that a monster exists in attitude report constructions in (Modern) Uyghur (Turkic; North China and Kazakhstan), which exhibit peculiar properties that have hitherto been unobserved in other languages. In particular, indexical shifting in Uyghur is sensitive to structural positions of the indexical items, and we account for this with a monster operator syntactically independent from the embedding attitude verb.

The organization of the paper is as follows: in Section 2, we introduce the basic properties of Uyghur indexical shifting. We present the shifting puzzle in Uyghur in Section 3. Section 4 contains the bulk of our analysis and the supporting evidence. Section 5 is devoted to validating the predictions of our theory. We conclude in Section 6.

2. Uyghur Embedding and Indexical Shifting

Just as in other languages with indexical shifting, indexical shifting in Uyghur is confined to attitude report constructions. Two types of embedded clauses are possible in Uyghur attitude reports: nominalized complement clause (2a) and finite complement clause (2b):

- (2) a. Ahmet [profesor-ning kit-ken-lik-i-ni] di-di
 Ahmet [professor-GEN leave-REL-NMLZ-3-ACC] say-PAST.3
 'Ahmet said that the professor left'
 - b. Ahmet [profesor kät-ti] di-di
 Ahmet [professor.NOM leave-PAST.3] say-PAST.3
 'Ahmet said that the professor left'

Although the sentences in (2) are synonymous, the two types of complement clauses exhibit different characteristics with respect to interpretation of indexicals: in nominalized complement clauses, nominative subjects and verbal agreement are interpreted relative to the context of the current utterance ("non-shifted" reading), whereas in finite complement clauses, they are interpreted relative to the reported context ("shifted" reading):

- (3) a. Ahmet [**mening** kit-ken-lik-**im**-ni] di-di Ahmet [1sg.gen leave-rel-nmlz-1sg-acc] say-past.3 \checkmark (non-shifted) 'Ahmet said that I_{speaker} left' \checkmark (shifted) 'Ahmet_i said that he_i left'
 - b. Ahmet [**män** kät-**tim**] di-di Ahmet [1sg leave-PAST.1sg] say-PAST.3 $\mathbf{X}(\text{non-shifted})$ 'Ahmet said that $I_{speaker}$ left' $\sqrt{(\text{shifted})}$ 'Ahmet_i said that he_i left'

Indexical Shifting in Uyghur

Indexical shifting in finite embedded clauses is a general phenomenon in Uyghur and happens with all attitude verbs compatible with finite complement clauses. For the sake of space, and we exclusively look at the verb *dä-mek* 'to say' in the present paper.

The reader may object that the construction in (3) is not an example of indexical shifting, but rather is an instance of direct speech report. While finite complements may look like quotations, a variety of tests reveal that this need not be the case. For example, they contain a wh-phrase taking the matrix scope together with shifted indexicals, as in (4):

(4) Tursun [män kim-ni kör-dim] di-di? Tursun [1sg who-acc see-past.1sg] say-neg-past.3
'Who did Tursun_i say he_i saw?'

Since quotations resist quantifying in (Quine, 1960, Cappelen and LePore, 2008), the embedded clause in (4) cannot be a quotation. Nonetheless, the first person indexicals still refer to the attitude holder. For more tests demonstrating non-quotation status of finite embedded clauses we refer the reader to the appendix at the end of the paper.

3. Puzzle: Shifting and Case

Having established that indexical shifting takes place in Uyghur finite complement clauses, this section presents the main puzzle our account deals with. We begin with the observation that in finite embedded, but not in matrix clauses (but not in matrix clauses), subjects can bear either nominative or accusative case:

- (5) a. Ahmet [profesor-{Ø/ni} kät-ti] di-di
 Ahmet [professor-{NOM/Acc} leave-PAST.3] say-PAST.3
 'Ahmet said that the professor left'
 - b. professor-{∅/*ni} kät-ti professor-{NOM/*ACC} leave-PAST.3
 'The professor left'

We have seen in (3) that nominative subjects of finite complement clauses obligatorily shift. In this respect, nominative embedded subjects differ from accusative embedded subjects, which cannot shift. This is illustrated in the examples below:

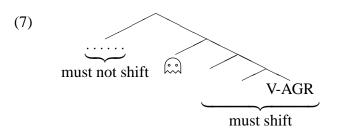
- (6) a. Ahmet [**män** kät-tim] di-di Ahmet [1sg.NOM leave-past.1sg] say-past.3 $\mathbf{X}(\text{non-shifted})$ 'Ahmet said that $I_{speaker}$ left' $\sqrt{(\text{shifted})}$ 'Ahmet_i said that he_i left'
 - b. Ahmet [meni kät-ti] di-di
 Ahmet [1sg.acc leave-PAST.3] say-PAST.3
 √(non-shifted) 'Ahmet said that I_{speaker} left'
 ✗(shifted) 'Ahmet_i said that he_i left'

Uyghur seems to differ from other languages with indexical shifting in having obligatory indexical shifting.¹ We also are not aware of any previous observations regarding the relevance of syntax to indexical shifting. For this reason, Uyghur provides a unique means to examine the syntax of this phenomenon. In the next section, we spell out our analysis of the clausal structure of finite complements.

4. Proposal: Bipartite Structure of Finite Complements

We follow Schlenker (1999), Schlenker (2003), Anand and Nevins (2004), and Anand (2006) among others and assume that a monster operator is syntactically present in Uyghur attitude report constructions, and this operator is responsible for shifted interpretation of indexicals embedded in finite complement clauses. In order to account for the difference between finite and nominalized complement clauses, furthermore, we assume that the Uyghur monster appears only and always in finite complement clauses.

Furthermore, We claim that the monster partitions the embedded clause into two parts: the part where indexicals shift and the part where indexicals do not shift. Since the monster is the operator that shifts the context, everything in its scope must shift. Certain constituents, however, can be located outside the scope of the monster ("above" the monster), and therefore do not receive shifted interpretation. Thus, the basic clause structure would look like the following (with the monster symbolized by Ω):



Recall that in the previous section, we observed that embedded accusative subjects never undergo indexical shifting, while embedded nominative subjects always shift. To account for this, we claim that accusative embedded subjects are structurally higher then the monster, whereas the nominative embedded subjects always remain in its scope.

In the remainder of this section, we present evidence in support of this analysis in several steps. First, it is shown that accusative indexical subjects are base-generated in the lower clause and hence are not arguments of the matrix predicate. Then we present data that suggest that accusative subjects are structurally higher than nominative subjects. Finally it is observed that accusative subjects can stay in the scope of the embedding attitude verb and hence can belong structurally to the embedded clause.

¹The sole exception to this we are aware of is Matses (Fleck et al., 2009). Slave may be a case of partial exception, in which the verb *hadi* 'he says (intransitive)' features obligatory indexical shifting, but not other attitude verbs (Anand and Nevins, 2004, Anand, 2006).

4.1. Accusative subjects are not separate arguments

Given the non-shiftability of accusative subjects, one might be tempted to analyze them as proleptic arguments of the attitude verbs with independent theta roles assigned in the matrix clause, just as the *of*-phrase in *John said of Mary that she left*. In *pro*-drop languages like Uyghur, this analysis seems tenable at first sight, and in fact has been propounded for some constructions in syntactically similar languages like Japanese (cf. Bruening 2001). However, there is evidence that accusative embedded subjects in Uyghur are generated in the lower clause.² The first piece of evidence comes from idiomatic interpretation: sentential idioms retain their idiomatic meaning even when the subject is marked accusative:³

- (8) a. toqquz qiz-ning tolghaq täng käl-di nine girl-GEN labor together arrive-PAST.3
 'Times are hard' (lit: "nine girls' labor pains came all at once")
 - b. Tursun [**toqquz qiz-ning tolghaq-ni** täng käl-di] di-di Tursun [nine girl-gen labor-acc together arrive-past.3] say-past.3 'Tursun said that times are hard'

The second piece of evidence comes from negative item licensing. Negative elements in Uyghur require a clause-mate or c-commanding licenser:

(9) män hichkim-ni kör-*(mi)-dim
 1sg.nom nobody-acc see-*(NEG)-PAST.1sg
 'I didn't see anybody'

(10) shows that negative accusative subjects can be licensed by embedded negation, demonstrating that embedded accusative subjects are in the lower clause at least at some point in the derivation.

(10) Ahmet [hichkim-ni kät-mi-di] di-di
Ahmet [nobody-acc leave-NEG-PAST] say-PAST.3
'Ahmet said that nobody left'

Thirdly, certain adverbial material licit only in the embedded clause can appear to the left of the accusative embedded subject. In the following example we place the adverb *ätä* 'tomorrow' to the left of the embedded accusative subject. This adverb cannot appear in the matrix clause in this case, showing that the embedded accusative subject must be in the embedded clause.

²None of the evidence presented here argues specifically against a Bruening-style analysis where accusative embedded subjects are *sometimes* proleptic. What we wish to claim is that accusative subjects need not be proleptic yet they always receive non-shifted interpretation.

³That the idiom in (8) is a true sentential idiom, and not an NP idiom, can be shown by the fact that only with the given verb (*käl-mek* 'to come') does the idiom retain the idiomatic meaning.

(11) tünügün Ahmet manga [ätä Aygül-ni ket-idu] di-di yesterday Ahmet 1sg.Dat [tomorrow Aygül-acc leave-IMPF.3] say-PAST.3
 'Yesterday Ahmet said that Aygül would leave tomorrow'

Fourth, there is a language specific constraint against two accusative NPs being in the same clause (Halpert 2009). The effects of this constraint can be seen with causativized ditransitives that disallow accusative objects.

- (12) a. Muhämmät Aygül-gä gül-(ni) ber-di Muhämmät Aygül-DAT flower-(Acc) give-PAST.3
 'Muhämmät gave Aygül a flower'
 - b. män Muhämmät-ni Aygül-gä gül-(*ni) ber-güz-dim 1sg Muhämmät-acc Aygül-dat flower-(*acc) give-past.1
 'I made Muhämmät give Aygül a flower'

For the evaluation of this constraint, the accusative subject is treated as belonging to the embedded clause. The contrast between (13a) and (13b) below shows that accusative subjects are fine with unmarked objects but not with accusative marked objects. (13c) shows that when the object bears some other case, accusative subjects are available.

(13)	a.	Tursun [meni nan yaq-ti] di-di Tursun [1sg.acc bread bake-past.3] say-past.3 'Tursun _i said that I _{speaker} made bread'
	b.	 * Tursun [meni nan-ni yaq-ti] di-di Tursun [1sg.acc bread-acc bake-past.3] say-past.3 'Tursun_i said that I_{speaker} made bread'
	c.	Tursun [meni imtihan-din $\ddot{o}t$ -ti] di-diTursun [1sg.acc test-ABL pass-past.3] say-past.3'Tursun _i said that $I_{speaker}$ passed the test'

Lastly, it is shown that embedded subjects receive accusative case within the embedded clause, and hence the accusative case assignment does not depend on an assigner in the matrix clause. We begin by demonstrating that Uyghur passive verbs do not assign accusative case:

- (14) a. doxtur Ahmet-ni kör-di doctor Ahmet-acc saw-past.3
 'A doctor saw Ahmet'
 - b. doxtur täripidin Ahmet-(*ni) kör-el-di doctor by Ahmet-(*acc) saw-pass-past.3
 'Ahmet was seen by a doctor'

This fact also holds for nominalized complements:

- (15) a. Ahmet manga [Aygül-ning kit-ken-lik-i-ni] di-di
 Ahmet 1sg.dat [Aygül-gen leave-rel-nmlz-3-acc] say-past.3
 'Ahmet told me that Aygül left'
 - b. manga [Aygül-ning kit-ken-lik-i-(*ni)] di-el-di
 1sg.dat [Aygül-gen leave-rel-nmlz-3-(*acc)] say-pass-past.3
 'I was told that Aygül left'

Nonetheless, embedded subject can receive accusative case even when embedding verb is passivized, which shows that the embedding verb is not the locus of accusative case assignment.

(16) manga [Aygül(-ni) kät-ti] di-el-di
1sG.DAT [Aygül(-Acc) leave-PAST.3] say-PASS-PAST.3
'I was told that Aygül left'

All the above data strongly suggest that embedded accusative subjects are base generated in the embedded clause.

4.2. Accusative subjects are structurally higher than nominative subjects

Having demonstrated that accusative embedded subjects originate in the embedded clause, we proceed to show that accusative subjects are indeed structurally higher than nominative subjects. The first piece of evidence comes from Binding Theory. The examples in (17) show that embedded reflexive subjects can be co-referential with the matrix subject only when they bear accusative case:⁴

- (17) a. män_i [päqät **öz**_i-**äm-ni-la** nan ye-män] di-dim 1sg [only REFL-1sG-ACC-only bread eat-IMPF.1sg] say-PAST.1sg 'I said that only I eat bread'
 - b. *? män_i [päqät öz_i-äm-∅-la nan ye-män] di-dim
 1sg [only REFL-1sg-NOM-only bread eat-IMPF.1sg] say-PAST.1sg
 'I said that only I eat bread'

This demonstrates that accusative subjects are closer to a binder in the matrix clause then their nominative counterparts. The example in (18) shows that embedded pronominal subjects cannot be co-referential with the matrix subject when they bear accusative case.

⁴In these examples we enclose the embedded subjects in "only" phrases in order to force the use of the pronoun, which otherwise would be pro-dropped.

- (18) a. män_i [päqät **män_i-la** nan ye-män] di-dim 1sg [only 1sg.nom-only bread eat-IMPF.1sg] say-PAST.1sg 'I said I eat bread'
 - b. *män_i [päqät meni_i-la nan ye-män] di-dim
 1sg [only 1sg.Acc-only bread eat-IMPF.1sg] say-PAST.1sg
 (Intended) 'I said I eat bread'
 - c. Ahmet [päqät **meni-la** nan ye-du] di-dim Ahmet [only 1sg.Acc-only bread eat-IMPF.3] say-PAST.1sg 'Ahmet said only I eat bread'

The second piece of evidence comes from the fact that the embedded subject can raise into the matrix clause only when it is in accusative.⁵

(19)	a.	Ahmet [istakan(-ni) buz-ul-di] di-di
		Ahmet [cup(-acc) break-pass-past.3] say-past.3
		'Ahmet said the cup broke'
	b.	istakan*(-ni) Ahmet [buz-ul-di] di-di
		cup*(-acc) Ahmet break-pass-past.3 say-past.3
		'Ahmet said the cup broke'

Having demonstrated that accusative embedded subjects are structurally higher than nominative embedded subject, in the next section we show that accusative embedded subjects need not be in the matrix clause.

4.3. Accusative embedded subjects can be below embedding verb

In this section we wish to show that accusative subjects can be in the scope of the embedding attitude verb. We present three pieces of evidence in support of our proposal. First, *de dicto* readings of accusative subjects are available:

(20) Tursun [tulpar-ni käl-di] di-di, äma tulpar yoq
 Tursun [Pegasus-Acc arrive-PAST.3] say-PAST.3 but Pegasus not.exist
 'Tursun said that a arrived, but Pegasus doesn't exist'

Second, embedded clauses with accusative subjects can be coordinated under the same verb:

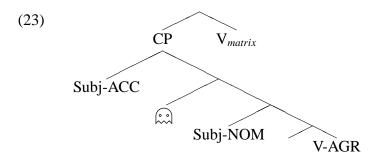
⁵There is a complicating factor: with a passivized matrix clause, the embedded nominative subject can appear within the matrix clause if it is agreed with in the matrix clause. We ignore this fact here.

(21) härbir oqughuchi [Aygül-ni kät-ti däp] wä [Ahmet-ni käl-di däp each student [Aygül-acc leave-PAST.3 C] and [Ahmet-acc arrive-PAST.3 C] bil-idu
] believe-IMPF.3
'Each student believes that Aygül left and that Ahmet arrived'

Third, recall that embedded accusative subjects trigger double accusative constraint violations in the embedded clause as shown in (13) above. However, the embedded accusative subjects do not trigger violations of this constraint with respect to matrix material. This is illustrated with a causativized *dä-mek* 'to say' that assigns accusative case to the causee in the matrix clause.

 (22) Ahmet-ni Aygül-gä [härbir oqughuchi(-ni) kät-ti] di-güz-dim Ahmet-acc Aygül-Dat [each student(-acc) leave-past.3] say-caus-past.1sg
 'I made Ahmet say to Aygül that every student left'

From the data above, we propose that the basic clausal architecture of Uyghur finite complement clauses looks as follows:



Importantly, given that accusative embedded subjects can be below the embedding verb but never receive shifted interpretation, it follows that attitude verbs are not monsters. This claim is attractive, since many Uyghur verbs take either nominalized or finite complement clauses, but indexical shifting happens only in the latter. We submit, therefore, that the monster is its own lexical item, different from the verb. This in turn enables us to entertain the idea that languages do not differ in the semantics of indexicals. Rather, the difference between languages lies in whether or not they have a monstrous lexical item (with Anand and Nevins 2004, Anand 2006 and contra Schlenker 1999, 2003).

Notice that our analysis makes a prediction that case marking on the embedded pronominal subject can be used as a benchmark to diagnose the scope of the monster operator. That is, it is predicted that when some particular phrase is structurally higher (to the left) of the accusative subject, it cannot shift, whereas all phrases lower than (to the right of) the nominative subjects must shift. It is shown in the next section that these predictions are borne out.

5. Embedded Subjects as Diagnostic

In Uyghur, accusative and dative NPs can scramble freely within the clause:

- (24) a. (xät-ni) män (xät-ni) yaz-dim letter-acc 1sg.nom letter-acc write-past.1sg 'I wrote a letter'
 - b. (Aygül-gä) Ahmet (Aygül-gä) bowaq-ni (Aygül-gä) körset-ti (Aygül-DAT) Ahmet (Aygül-DAT) baby-ACC (Aygül-DAT) show-PAST.3
 'Ahmet showed the baby to Aygül'

(25) shows that dative arguments can shift when they follow the nominative subject.

(25) CONTEXT: Ahmet told me "I sent you a letter the other day." Now I am telling you what he said
Ahmet manga [män sanga xät äwät-tim] di-di
Ahmet 1sG.DAT [1sG.NOM 2sG.DAT letter send-PAST.1sG] say-PAST.3
'Ahmet, told me that he, sent a letter to me'

Crucially, (26) demonstrates that with the same word order, the non-shifted interpretation is unavailable, which is what we predict. The logic of the example is that the given context supports only the non-shifted interpretation, and the infelicity of the sentence indicates the lack of this reading.

(26) CONTEXT: Muhämmät told me "I sent a letter to Aygül." I am talking to Aygül:
Muhämmät manga [män sanga xät äwät-tim] di-di Muhämmät 1sg.dat [1sg.nom 2sg.dat letter send-past.1sg] say-past.3 Unavailable interpretation: 'Muhämmät_i told me that he_i sent a letter to you_{Aygül}'

The same obtains with accusative objects:

- (27) a. CONTEXT: Ahmet say to Aygül "I like you". I am telling Tursun what he said: Ahmet Aygül-ge [män seni yaxshi kör-ymän] di-di Ahmet Aygül-DAT [1sg.NOM 2sg.Acc well see-IMPF.1sg] say-PAST.3
 'Ahmet told Aygül that he likes her'
 - b. CONTEXT: Ahmet told me "I like Aygül". I tell Aygül what he said:
 #Ahmet [män seni yaxshi kör-ymän] di-di
 Ahmet [1sg.NOM you.Acc well see-IMPF.1sg] say-PAST
 Unavailable interpretation: 'Ahmet said that he likes you_{Aygül}'

Our second prediction is that a dative argument preceding an accusative embedded subject must get the non-shifted reading. Firstly, (28) shows it can:

(28) CONTEXT: Ahmet said to Muhämmät "John sent a letter to Aygül". Muhämmät told me what Ahmet said, so I tell Aygül about this:
Ahmet [sanga meni xät äwät-ti] di-di
Ahmet [2sG.DAT 1.ACC letter send-PAST.3] say-PAST.3
'Ahmet said that I sent a letter to you'

Moreover, (29) shows that it is the only interpretation available for this sentence:

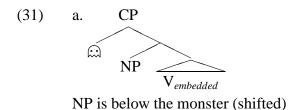
(29) CONTEXT: Ahmet said to Aygül "John sent a letter to you." Aygül told me what Ahmet said. Now I tell Muhämmät what I heard:
Ahmet Aygül-gä [sanga meni xät äwät-ti] di-di Ahmet Aygül-DAT [2sg.DAT 1sg.Acc letter send-PAST.3] say-PAST.3
'Ahmet said to Aygül that I sent a letter to Muhämmät'

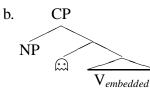
We predict, in principle that the embedded objects should behave the same way, but this cannot be tested due to the double accusative constraint.

We have just seen that our basic predictions are correct and the case of the embedded subject can be used to localize the position of the monster. Now let us consider cases where datives and objects are ambiguous between shifted and non-shifted interpretation. This situation arises because Uyghur allows subject *pro*-drop.

(30) (män) kät-tim (1sg.nom) left-past.1sg 'I left'

In the absence of an overt subject, we cannot fix the location of the monster, and hence either interpretation should be available. More concretely the string '[$_{CP}$ non-SubjNP V]' could have the following two parses:





NP is above the monster (not shifted)

That this prediction is correct is shown by (32) with dative phrases. The context in (32a) supports only the shifted interpretation of the dative indexical and that in (32b) supports only its non-shifted interpretation, and the sentence is fine in both contexts.

(32) a. CONTEXT: Ahmet told me "I sent you a letter the other day." Now I am telling you what he said:
Ahmet manga [sanga xät äwät-tim] di-di
Ahmet 1sg.Dat [2sg.Dat letter send-PAST.1sg] say-PAST.3
'Ahmet said to me that he sent a letter to me'

b. CONTEXT: Muhämmät told me "I sent a letter to Aygül." Talking to Aygül: Muhämmät manga [sanga xät äwät-tim] di-di Muhämmät 1sg.dat [2sg.dat letter send-past.1sg] say-past.3 'Muhämmät told me that he sent a letter to you'

Moreover, as (33) demonstrates, accusative objects behave the same way. The context in (33a) supports the shifted interpretation, while the context in (33b) supports the non-shifted one. The same string is licit in both contexts.

(33) a. CONTEXT: I saw Ahmet say to Aygül "I like you." I am telling Tursun what he said: Ahmet Aygül-gä [seni yaxshi kör-ymän] di-di Ahmet Aygül-DAT [2sg.Acc well see-IMPF.1sg] say-PAST.3 'Ahmet said to Aygül that he likes her'
b. CONTEXT: Ahmet told me "I like Aygül." I tell Aygül what he said: Ahmet [seni yaxshi kör-ymän] di-di Ahmet [2sg.Acc well see-IMPF.1sg] say-PAST 'Ahmet said that he likes you'

Before closing this section, we present two more pieces of evidence corroborating our analysis. Certain expressions are just not shiftable in Uyghur, such as *qaysi* which' phrases. Indexicals contained within them can only receive non-shifted interpretation.

(34) Ahmet [qaysi oqughuchi-m-ni kör-dim däp] bil-idu
 Ahmet [which student-1sg-acc see-PAST.1sg C] believe-IMPF.3
 √(non-shifted possessor) 'Which of my_{speaker} students does Ahmet think he saw?'
 ✗(shifted possessor) 'Which of his_i students does Ahmet_i think he saw?'

We predict that nominative embedded subjects cannot precede *qaysi* objects, since this word order would force the *qaysi*-phrase to be under the monster's scope. That this is true is shown in (35):

(35) *Ahmet [män qaysi oqughuchi-m-ni kör-dim däp] bil-idu
Ahmet [1sg.Nom which student-1sg-Acc see-PAST.1sg C] believe-IMPF.3
'Which of my_{speaker}/his_i students does Ahmet_i think he saw?'

Second, our theory further predicts that indexicals that occur within the same NP must either shift together or not at all, depending on the position where the entire NP appears. Again, this prediction is borne out:

(36) Ahmet Aygül-gä [[sän yaxshi kör-idi-ghan] oqughuchi-m-ni imtihan-din öt-ti Ahmet Aygül-DAT [[2sG well see-IMPF-REL] student-1sG-ACC test-from pass-PAST.3] di-di] say-PAST.3 'Ahmet said that the student of mine that you like passed the test' *'Ahmet said that the student of mine that Aygül likes passed the test' *'Ahmet said that the student of his that you like passed the test' *'Ahmet said that the student of his that Aygül likes passed the test' *'Ahmet said that the student of his that Aygül likes passed the test'
(37) Ahmet Aygül-gä [[sän yaxshi kör-idi-ghan] oqughuchi-m imitihan-din öt-ti Ahmet Aygül-DAT [[1sG well see-IMPF-REL] student-1sG test-ABL pass-PAST.3

] di-di

] say-past.3

*'Ahmet said that the student of mine you like passed the test'

*'Ahmet said that the student of mine that Aygül likes passed the test'

*'Ahmet said that the student of his that you like passed the test'

'Ahmet said that the student of his that Aygül likes passed the test'

6. Conclusions

Our analysis of Uyghur indexical shifting crucially relies on the syntactic position of the monster operator that partitions the embedded clause into a shifted domain and an unshifted domain. The novelty of our account is mainly in the correlation of clausal syntax and shifting properties, and we showed that embedded objects and datives can appear within the upper (unshifted) or the lower (shifted) domain with the predicted consequences.

A. Uyghur Embedded Clauses Are Not Quotations

In this appendix, we show that Uyghur finite clausal complements to attitude verbs do not have to be quotations with three kinds of tests besides the *wh*-test mentioned in the text.

First, recall that Uyghur negative items require a negative licenser. In finite complement clauses they can be long-distance licensed by negation in the matrix clause while embedded indexicals being shifted as in (38).

(38) Tursun [män hichkim-ni kör-dim] di-mi-di Tursun [1sg nobody-acc see-past.1sg] say-NEG-PAST.3
'Tursun_i didn't say that he_i saw anyone'

This demonstrates that the embedded clause in (38) could not be quotation because, on its own, the embedded is ungrammatical. Second, embedded clauses can be non-verbatim:

(39) CONTEXT: Ahmet and Muhämmät are students and took a test. After the test, I met Ahmet, who said "Only I passed the test" (*päqät mänla imtihandin öttim*). A while later, I met Muhämmät who said the exact same thing. Since at least one of them must be wrong, I went to the teacher to ask. Now I tell her what they said:

Ahmet wä Muhämmät [päqät biz-la imtihan-din öt-tuq] di-di Ahmet and Muhämmät [only we-Foc test-ABL pass-PAST.1PL] say-PAST.3 'Ahmet and Muhämmät each_i said that only he_i passed the test'

In (39), embedded speech report differs from the original speech with addition of plural feature whereby ensuring that the embedded clause is not a quotation. Nonetheless, pronominal indexicals remain shifted.

Third, the subjects of finite embedded clause may be accusative, as we have seen above. Given the fact that matrix subjects cannot be accusative, and coupled with the basic assumption that quotations must be grammatical sentences, this also demonstrates that embedded finite complement clauses need not be quotations.

References

Anand, Pranav. 2006. De De Se. Ph.D. dissertation, MIT.

- Anand, Pranav, and Andrew Nevins. 2004. Shifty operators in changing context. In *Proceedings of SALT 14*.
- Bruening, Benjamin. 2001. Raising to object and proper movement. Ms, University of Delaware.
- Cappelen, Herman, and Ernest LePore. 2008. Quotation. In *The Stanford Encyclopedia* of *Philosophy*, (ed.) Edward N. Zalta. Metaphysics Research Lab, CSLI, Stanford University.
- Deal, Amy Rose. 2008. Events in space. In Proceedings of SALT 18.
- Fleck, David, Rainer Ludwig, Robert Munro, and Uli Saulerland. 2009. Reported speech in Matses. In *Proceedings of SULA 5*.
- Halpert, Claire. 2009. Light verb constructions and case patterns in Uyghur. Ms., MIT.
- Kaplan, David. 1977. Demonstratives. Ms., UCLA, Los Angeles, CA.
- Quer, J. 2005. Context shift and indexical variables in sign languages. In SALT 15.
- Quine, Willard Van Orman. 1960. Word and Object. Cambridge, MA: MIT Press.
- Schlenker, Philippe. 1999. Propositional Attitudes and Indexicality. Ph.D. dissertation, MIT.
- Schlenker, Philippe. 2003. A plea for monsters. *Linguistics and Philosophy* 26. Speas, Margaret. 1999. Person and point of view in Navajo. In *WCCFL* 18.

Department of Linguistics and Philosophy Massachusetts Institute of Technology 77 Massachusetts Avenue, 32-D808 Cambridge, MA 02139

kirills@mit.edu, ysudo@mit.edu