Shifted Indexicals in Uyghur

Kaplan (1977) conjectured that the interpretation of indexical expressions ('I', 'you', 'now', 'here', etc.) in natural language is always dependent on the actual context of utterance, and that no context shifting operators (or **monsters**, as Kaplan called them) exist in natural languages. However, since Schlenker's (1999, 2003) seminal work on Amharic, there has been mounting evidence suggesting that in at least certain languages, indexicals seem to be able to refer to features of non-actual contexts and hence that monsters do exist in natural language (Anand 2006, Anand & Nevins 2004, Deal 2008, Fleck et al. 2009, Quer 2005). The present work adds novel data to this body of work.

We demonstrate that in Uyghur, a Turkic language spoken in China and Kazakhstan, indexicals in clausal complemens to attitude verbs refer to non-actual contexts (henceforth **shifted indexicals**.) Our data suggest that shifted indexicals in Uyghur have different properties from those found in Amharic or other languages studied by the authors mentioned above, and we claim that the theories due to Schlenker (1999, 2003), Anand (2006), and Anand & Nevins (2004) cannot adequately account for our data. We propose a new theory by modifying von Stechow's (2002) feature binding mechanism, and discuss differences among languages with shifted indexicals.

Uyghur attitude verbs fall into three classes: those that only take nominalized complements, those that only take finite clausal complements and those that take both. Our consultants report no semantic difference between finite and nominalized embeddings:

(1) a. Tursun [Norvin-(niŋ) kit-ken-lik-i]-ni di-di.

Tursun [Norvin-(GEN) leave-REL-NML-3SG]-ACC say-PAST.3

'Tursun said that Norvin left.'

(Nominalized)

b. Tursun [Norvin-(ni) ket-ti] di-di.

Tursun [Norvin-(ACC) leave-PAST.3] say-PAST.3

'Tursun said that Norvin left.'

(Finite)

In nominalized complements, the embedded subject can be either genitive or nominative (the latter morphologically unmarked) while in finite complements subjects can be either accusative or nominative.

All Uyghur complements, nominalized or finite, feature obligatory subject agreement. In attitude reports, verbal agreement undergoes obligatory shifting in finite complements, but never shift in nominalized complements. Thus, the first person agreement in (2a) obligatorily refers to the actual speaker, whereas in (2b) it obligatorily refers to the attitude holder (=Tursun) and cannot refer to the actual speaker.

(2) a. Tursun [kit-ken-lik-**im**]-ni di-di.

Tursun [leave-REL-NML-1SG]-ACC say-PAST.3

'Tursun said I left' (*Tursun said he left)

(Nominazlied)

b. Tursun [ket-**tim**] di-di.

Tursun [leave-PAST.1SG] say-PAST.3

'Tursun_i said he_i left' (*Tursun said I left)

A similar state of affairs obtains with second person agreement.

(Finite)

At this point, the finite complement in (3b) might look like a quotation, however, a variety of tests, including NPI licensing, wh-extraction, subject raising, transparency of temporal and locative indexicals, and collective reporting of speech acts demonstrate that embedded finite clauses need not be quotations. Nonetheless, the obligatory shifting of pronouns and agreement described above holds in all cases of finite complements.

Indexicals other than verbal agreement also shift in Uyghur finite complements, and different indexicals exhibit different shifting possibilities. For example, pronominal subjects obligatorily shift if they are nominative, and cannot shift if they are accusative:

(3) a. Omer [men ket-imen] di-di.

Omer [1SG.NOM leave-IMPF.1SG] say-PAST.3

'Omer_i said that he_i would leave.' (*Omer said that I would leave)

b. Omer [meni ket-idu/*ket-imen] di-

Omer [1SG.ACC leave-IMPF.3/*leave-IMPF.1SG] say-PAST.3

'Omer said that I would leave.' (*Omer_i said that he_i would leave.)

Notice that 1st-person agreement on the embedded verb in (3b) is ungrammatical due to agreement mismatch. That is, the accusative first person subject is a third person in the shifted context against which the verbal agreement is evaluated.

With respect to shifting, accusative objects pattern with nominative subjects, that is to say, they must

shift. On the other hand, locative indexicals and certain temporal adverbs never shift. Pronominal dative arguments behave differently from other abovementioned indexicals in that they shift optionally. The shifting data is summarized in the following table:

Indexical	NOM Subj.	ACC Subj.	ACC Obj.	Locative	Dative
Shifting	Obligatory	Impossible	Obligatory	Impossible	Optional

In Uyghur, furthermore, the type of embedding verb matters for the shifting possibilities of pronouns. First of all, verbs of saying ($d\varepsilon$ - 'say', $s\varnothing zl\varepsilon$ - 'speak') license shifting of pronouns of all persons, while verbs of thinking (bil- 'believe', ojla- 'think') license only shifted 1st person pronouns and an embedded finite clause containing a shifted 2nd person pronoun becomes ungrammatical. Moreover, in finite complements embedded under active verbs of hearing (ayla- 'hear') and under passivized attitude verbs all shifted pronouns become ungrammatical. However, agreement shifting is still obligatory with these verbs.

Schlenker (1999, 2003) claims that attitude verbs in all natural languages are monsters and quantify over contexts. According to him, cross-linguistic difference regarding indexical shifting comes from the lexical specifications of indexicals. That is, in English, the 1st person singular pronoun is marked as [+actual] and must refer to the actual context, while in Amharic, it is specified as $[\pm actual]$ and can refer to a non-actual context that an attitude verb introduces.

However, in Uyghur, it seems that verbs themselves are not monsters, as the same verb is used in both nominalized and finite attitude reports, but only in the latter does indexical shifting take place. Also, accusative pronominal subjects never shift, but can stay in the scope of the attitude verb, as demonstrated by the following example in which the accusative subject has a *de dicto* interpretation.

(4) Tursun [tulfar-ni kæl-di] didi ama tulfar yoq.

Tursun [pegasus-ACC arrive-PAST.3] say-PAST.3 but pegasus NEG.EXIST

'Tursun said that a Pegasus arrived, but there are no Pegasi'

Furthermore, as we have seen above, with *aŋla-* 'hear' and passivized verbs, pronominal subjects cannot appear, while agreement still shifts. This suggests that verbs themselves are not monsters.

Anand & Nevins (2004) propose a theory in which monsters are syntactically real and independent from attitude verbs. They maintain that the semantics of attitude verbs and indexicals is the same in all languages (contra Schlenker), and cross-linguistic difference resides in the presence or absence of monsters in the lexicon. For example, English does not have monsters, while languages like Amharic do. Furthermore, they posit several kinds of monsters differing in which parameter(s) of the context that the monster shifts, which accounts for the within language variation in Slave, where different verbs license different kinds of shifted indexicals.

Anand & Nevins' theory is largely based on the observation that the "Shift Together" constraint (clause-mate indexicals cannot shift independently) holds in Zazaki and Slave. They account for this constraint by assuming that a monster shifts the context once and for all and takes scope over a clause. Thus, when and only when a monster is present, all indexicals under its immediate scope must shift together. It is clear that Shift-Together is violated in Uyghur, although within language variation similar to that of Slave is observed. Since Anand & Nevins' theory of shifted indexicals crucially assumes Shift-Together, it is not adequate for our Uyghur data. In particular, it seems impossible to account for the data of verbs of believing, hearing and passivized verbs where verbal agreement obligatorily shifts but pronominal shifting is restricted, although they can refer to the same parameter.

We suggest that the Uyghur data is best accommodated via an account along the lines of von Stechow (2002) and Heim (1994). The fact that in the same clause some indexicals shift obligatorily while others cannot shift indicates that there are in fact no monsters in Uyghur; rather, certain indexicals have some of their features deleted when bound in a particular syntactic configurations, just as von Stechow claims. Our account spells out the binding configurations which obtain the Uyghur facts with respect to obligatory, optional, and impossible shifting of Uyghur indexicals.

References: • Anand, P. (2006) *De De Se*. Ph.D. dissertation, MIT. • Anand, P. & Nevins, A. (2004) Shifty operators in changing context. *SALT14*. • Deal, A. R. (2008) Events in space. *SALT18*. • Fleck, D., R. Ludwig, M. Robert & U. Sauerland. (2009) Reported Speech in Matses: Obligatory Perspective Shift with Syntactic Transparency. *SULA5*. • Heim, I. (1994) Puzzling reflexive pronouns in de se reports: Handout from Bielefeld conference. • Kaplan, D. (1977) Demonstratives. Ms., UCLA. • Quer, J. (2005) Context shift and indexical variables in sign languages. *SALT15*. • Schlenker, P. (1999) *Propositional Attitudes and Indexicality*. Ph.D. dissertation, MIT. • Schlenker, P. (2003) A plea for monsters. *L& P*, 26. • von Stechow, A. (2002) Feature deletion under semantic binding. *NELS33*.