Shift-together in Burji

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1 Shift-together in Burji

This paper discusses a following example in Burji, an east-Cushitic language.[1]

(1) Hassan engo Hadija ga bubinka robb aniga ash wol angul aayinu
Hassan told Hadicha Foc all Wednesday I you each.other see want
barret lasa shingod Addis/*US.
yesterday there Addis/US
'Every Wednesday Hassan told Hadicha that he wanted to meet her the day before here in Addis Ababa (Literally, every Wednesday Hassan told Hadicha I want to meet you yesterday (on Tuesday) there in Addis (Hassan is in US while the speaker is in Addis)).'

In (1), the first and second person pronouns behave like bound pronouns of *Hassan* and *Hadicha* in the matrix clause and do not refer to the speaker or the hearer, as they do in English. *Yesterday* does not refer to one day before the utterance, either, but the day before the reference time of the matrix clause. *Shingod* 'remote location' in fact means 'here,' the actual location of the speaker.

If such a sentence is a typical case of what is called "shift-together" of person, temporal and locative indexicals under attitude predicates (Schlenker 1999, Anand and Nevins 2004), the reportative verb is a monster which maneuvers the context parameter so that the indexicals shift reference from the context to the index.

(2) $[\![\forall t \exists e[t \sqsubseteq$ Wed H. told H.(e) at t $OP_\forall$ he wants to meet her the day before t here in A.]$]\!]^{c,i}$

$= [\![\forall t \exists e[t \sqsubseteq$ Wednesday Hassan told Hadicha(e) at t $]\!]^{c,i}$

$([\![$I want to meet you yesterday of t there in Addis$]\!]^{i,i})$

The context (c) and index (i) are tuples $< a, h, l, t, w >$: author (a), hearer (h), location (l), time (t), and world (w). The monstrous operator $OP_\forall$ maneuvers all indexicals in its scope so that the person, locative, temporal, and world parameters are all overwritten by the index. The index time on Wednesdays is the context time in the embedded clause.

Before discussing the analysis, let us examine indexical shifting in Burji in more detail. The first person pronoun *eqah* 'I' may either refer to the matrix subject, not the speaker, in the embedded clause in (3a) or in the relative clause in (3b). On the contrary, in English, *I* in *Hassan said I met a girl* and in *The girl who Hassan said I met is pretty* only refers to the speaker. On the other hand, the pronoun *issuh* 'he' in the embedded clause and a relative clause may refer to the matrix subject *Hassan* as in (4), similar to English.

(3) a. [$_{TP}$ Hassan$_i$-ingo innobas [$_{CP}$ eqah$_{\{\surd i/*speaker\}}$ alicho angulanoh]].

     Hassan-REF   said   I   girl   see.PAST

     'Hassan said he met a girl.'

    b. [$_{TP}$ [$_{DP}$ Alicho [$_{RC}$ Hassan anglan   eqah$_{\{\surd i/*speaker\}}$ innosh]] kajelah kajelt].

             girl   Hassan see.PAST I   said   pretty

     'The girl who Hassan said he met is pretty.'

(4) a. [$_{TP}$ Hassan$_i$-ingo innobas [$_{CP}$ issuh$_i$ alicho angulanoh]].

     Hassan-REF   said   he   girl   see.PAST

     'Hassan said he met a girl.'

    b. [$_{TP}$ [$_{DP}$ Alicho [$_{RC}$ Hassan$_i$ angulanah anglani   issuh$_i$ innosh]] kajelah kajelt].

             girl   Hassan see   see.PAST he   said   pretty

     'The girl who Hassan said he met is pretty.'

The first person pronoun refers to the matrix subject in the possessive form in (5) and in *wh*-extraction in (6b), and in the object extraction in (7b).

(5) [$_{TP}$ Hassan$_i$ innobas [$_{CP}$ iyy$_{\{i/*speaker\}}$ beluhu dansanah]].

    Hassan said   my   friend nice

    'Hassan said his friend is nice.'

(6) a. [$_{TP}$ Marsa$_i$ innobas [$_{CP}$ ann$_{\{i/speaker\}}$ Daro angula-hayo]].

      Marsa said   I   Daro meet.FUT

    'Marsa said he would meet Daro.'

    b. [$_{CP}$Marsa$_i$ innobas [$_{CP}$ issuh$_{\{i/speaker\}}$ aitah angulah]]?^{2}

       Marsa   said   I   who meet

    'Who did Marsa say he would meet?'

(11) [$_{TP}$ [$_{DP}$ Lall   [$_{RC}$ onnih Daro eqah$_{i/speaker}$ hayoh innow]] inah benoh].

              cow.SG   that Daro I   loved said   had lost

   'The cow that Daro said he loved was lost.'^{3}

The temporal indexical *boruna* 'tomorrow' also shifts reference from one day after the

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^{2}The example (6b) does not suggest that Burji is a *wh-in-situ* language. *Wh*-word is fronted canonically in the absence of focus on 'you' in (7b) while pointing at the hearer fronts 'you' as in (7a).

  (7) a. Ash aitah?
      you who
      'Who are you?'
    b. Ash aitah?
      you who
      'Who are you?'
  (8) a. Onnuh mitah?
      it   what
      'What is it?'
    b. Onnuh mitah?

      'What is it?'
  (9) a. Mitah ash kaid hujiitha?
      what you today do
      'What did you do today?'
    b. Ash mitah kaid hujiitha?
      you what today do
      'What did you do today?'
    c. Ash kaid   mitah hujiitha?
      you today what do
      'What did you do today?'
    d. *Ash kaid hujiitha mitah?
      you   today do   what
      'What did you do today?'
 (10) a. Haa   mechafi ash nababthah?
      which book   you read.PRES
      'What book {do you read (everyday)/are you reading (now)?'
    b. Haa   mechafi ash nababano?
      which book   you read.PAST
      'What book did you read?'
    c. Haa   mechafi ash nabbaba?
      which book   you read.FUT
      'What book will you read?'

^{3}The plural form of 'cow' is *lalu.*

utterance to the next day after the reference time of the matrix clause. In (12), the day of meeting *boruna* 'tomorrow' may refer actually to 'today', the day of utterance, and *kaid* 'today' can refer to 'yesterday' in (13).

(12) [$_{TP}$ Baretlas   Marsa-ingo esagah   wariano [$_{CP}$ hequeh Dawe boruna
      yesterday Marsa   me(speaker) told   that   Dawe tomorrow
      eqah$_{\{\sqrt{speaker}/\sqrt{Marsa}\}}$ anguithah]].
      I   meeting
      'Yesterday Marsa told me that Dawe was meeting {him/me} {tomorrow/today}.'

(13) [$_{TP}$ Hoo beluh [$_{RC}$ Marsa-ingo baretlas/kaid   eqah angulanoh inno] baretlas   esagh
      the friend   Marsa   yesterday/today I   met   said yesterday me
      bannoh].
      visited
      'The friend that Marsa said he met {yesterday/today} visited me yesterday.'

Both *baretlas* 'yesterday' and *fajakare* 'the day before yesterday' switch reference to two and three days before the utterance in (14).

(14) [$_{TP}$ [$_{DP}$ Bubint biskilesh [$_{RC}$ bubinka dhirash$_i$ nisinah$_{i/speakers}$ baretlas   ofanina innoh
      all.FEM bike   all.MASC boys   us   yesterday rode   said
      baretlas/fajakare]]   dansathah].
      yesterday/the day before yesterday nice
      'All bikes that all boys said {yesterday/the day before yesterday/three days ago} (Lit. {yesterday/the day before yesterday}) that {they/we} rode yesterday were nice.' [4]

Locative indexical *shingod* 'there' and *kagotha* 'here' also shift reference. In (15), *shingod* 'there' refers to the speaker's location while *kagotha* 'here' is shifted to the location of the event described in the embedded clause.

(15) Hoo beluh Marsa-ingo baretlas/kaid   eqah angulanoh kagotha/shingod inno baretlas
      the friend Marsa   yesterday/today I   met   here/there   said yesterday
      esagh bannoh Moyale
      me   visited Moyale.

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[4]*Bubint* 'all' modifies feminine nouns such as 'flies.' *-sh* ending as in *biskilesh* is a feminine form. *Bubint* modifies 'buffaloes,' 'robots,' 'butterflies' or 'books' in the present tense, *bubinka* agrees with 'cars' in the past tense, while *bubink* matches 'pens,' 'computers,' 'cars' with masculine gender in the present tense.

'The friend that Marsa said he met yesterday {here (Moyale)/ there (Addis)} visited me yesterday in Moyale.'

Thus, in Burji, the person, temporal and locative indexidals all shift together.

2 Monster vs Binding Approach

Even though Kaplan (1977, 1989) claimed that indexicals are directly referential, such shift-together phenomena in Burji seems to support the existence of context-shifters called *monsters*. The verb *inno* 'said' in (15) indicates the existence of the monstrous operator which shifts all indexicals in the scope. The context parameters are overwritten by the index parameters, as in (16).

(16) ⟦Marsa said $OP_\forall$ I met the friend here yesterday⟧^{c,i} =

⟦Marsa said⟧^{c,i} ⟦he met the friend there the day before yesterday⟧^{i,i}

However, anti-monstrous accounts have presented an alternative analysis. Agreeing with Kaplan (1977, 1989) which claimed that indexicals are directly referential, von Stechow (2003) considers pronouns and tenses to be bound variables. Ogihara (2006) also builds on Lewis (1979) and argues that the embedded clause denotes a property. The universal quantifier *every Wednesday* binds a time variable of the telling event in the matrix clause, and then, the time variable binds *yesterday* which is the desired time of meeting.

(17) $\forall\, 1 \sqsubseteq$ Wednesday Hassan$_2$ tells Hadicha$_3$ at 4 in 5 at t_1 [$\lambda 2, 3, 4, 5.$ x$_2$ wants to meet y$_3$ the day before t_1 at remote place from l$_4$ in w$_5$]

The binding approach accounts for self-awareness of Hassan that he himself wants to meet Hadicha one day before because the first person pronoun is bound by the matrix subject. On the other hand, the monstrous approach does not straightforwardly account for the *de se* reading. The shifted first person pronoun in the embedded clause may co-refer to the matrix subject without his belief of self-awareness. I assume that *tell* in Burji is a belief report so that the world is compatible with Hassan's belief at context world, which implies self-awareness.

(18) ⟦ $\forall t \sqsubseteq$ Wednesday Hassan tells Hadicha at t⟧^{c,i}

(⟦$OP_\forall$ I$_c$ want [PRO to meet you yesterday of t_c at here$_c$ in Addis in w$_c$]⟧^{c,i})

$= [\![\forall t \sqsubseteq$ Wednesday Hassan tells Hadicha at $t]\!]^{c,i}$

$([\![I_i$ want $[PRO_i$ to meet you$_i$ yesterday of t_i here$_i$ in Addis in $w_i]]\!]^{i,i})$

$= [\![\forall t \sqsubseteq$ Wednesday $\forall w'$ $DOX_{Hassan}(w)$ at $t]\!]^{c,i}$

$([\![\forall w'.BOUL_{I_i}(w_i)$ $[PRO_i$ meet you$_i$ yesterday of t_i here$_i$ in Addis in $w']]\!]^{i,i}$

In all w' compatible with Hassan's belief in w_c at t on every Wednesday, I_i's want-worlds are such that PRO_i meets you$_i$ yesterday of t_i here$_i$ in Addis

In (18), the telling act is an expression of belief. Hassan's belief on himself, belief *de se* is that he wants to meet Hadicha the day before. The monstrous operator shifts the context world to index world which is Hassan's belief world.

3   Conclusion

This paper provided data in Burji that all indexicals–first and second persons, temporal, locative and world parameters shift together. The reportative verb shifts the context world to index world which is doxastically accessible worlds so that *de se* reading is obtained.

References

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