Long-distance agreement

LING 252 · Ethan Poole · 3 March 2022
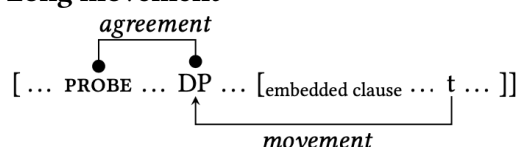
1 Bhatt and Keine (2017) [an overview paper]

- *Basic facts about LDA (in Hindi)*[1]

  - LDA is optional in most cases.

  - In the presence of LDA, infinitival agreement is required.

  - The matrix predicate may agree with an embedded object, but an embedded predicate may *not* agree with a matrix object. LDA is asymmetric.

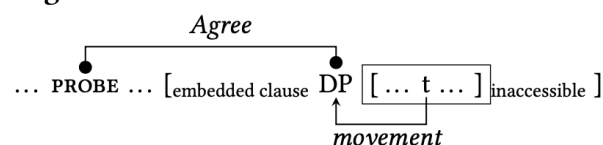 - Subject clauses are systematically opaque for LDA.

[1] We've already seen most of these facts, so I won't dwell on them.
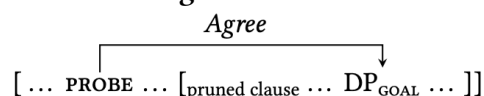
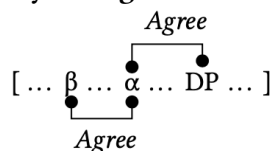∗ *Analyses in the literature*

(1) **Long movement**

agreement

$[\ldots$ PROBE $\ldots$ DP $\ldots$ $[_{\text{embedded clause}} \ldots$ t $\ldots$ $]]$

movement

(2) **Edge movement**

Agree

$\ldots$ PROBE $\ldots$ $[_{\text{embedded clause}}$ DP $[\ldots$ t $\ldots$ $]_{\text{inaccessible}}$ $]$

movement

(3) **Restructuring via clause union**

Agree

$[\ldots$ DP$_{\text{SUBJ}}$ $\ldots$ DP$_{\text{OBJ}}$ $\ldots$ $[\text{V}_{\text{INFIN}}\ \text{V}_{\text{FIN}}]]$

(4) **Restructuring via small clauses**

Agree

$[\ldots$ PROBE $\ldots$ $[_{\text{pruned clause}} \ldots$ DP$_{\text{GOAL}}$ $\ldots$ $]]$

(5) **Cyclic Agree**

Agree

$[\ldots$ β $\ldots$ α $\ldots$ DP $\ldots$ $]$

Agree

(6) **Proxy agreement**

agreement

PROBE $\ldots$ pro_i $\ldots$ $[\ldots$ DP$_i$ $\ldots]$
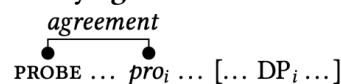
- **Evidence for an in-situ dependency**
  - As we have already seen, an object that is part of an idiom may control LDA:

  (7) Raam-ne Prataap-kii |khuub marammat| kar|-nii|/-naa
      Ram-ERG Pratap-GEN lot   repair.F   do-INF.F/-INF.M.SG
      caah-|ii|/-aa.
      want-PERF.F.SG/-PERF.M.SG
      'Ram wanted to give Pratap a good beating.'

  - Such idiomatic objects are barred from movement:

  (8) #|Pratap-kii khuub marammat| Ram-ne   *t* kii.
      Pratap-GEN lot   repair   Ram-ERG   do.PERF.F.SG
      'Ram gave Pratap a good beating.'

  ⇒ On a movement analysis, it is unexpected that movement of an idiomatic object decreases the availability of the idiomatic reading, while LDA has no such impact.

  - This fact follows straightforwardly on (most of) the other analyses.

- **Scope**
  - Under LDA, the embedded object may take scope above or below the matrix predicate, but under default agreement, it is confined to narrow scope:

  (9) a. Naim-ne [har   kitaab paṛh-nii] caah-ii   thii.
          Naim-ERG   every book.F read-INF.F   want-PERF.F be.PST.F.SG
          every > want: 'For every book, Naim wanted to read it.'
          want > every: 'Naim's desire: to read every book'
      b. Naim-ne [har   kitaab paṛh-naa   ] caah-aa   thaa.
          Naim-ERG   every book.F read-INF.M.SG   want-PERF.M.SG be.PST.M.SG
          **every > want:* 'For every book, Naim wanted to read it.'
          want > every: 'Naim's desire: to read every book'   [*Bhatt 2005: 799*]

  ⇒ This fact follows straightforwardly on a movement analysis, assuming the moved agreement controller can reconstruct.

  - Other analyses, though, require additional stipulations.

- **NPI licensing**
  - In Hindi, nonfinite object clauses allow an embedded negation to license a matrix NPI.

  - Crucially, if an embedded negation licenses a matrix NPI, LDA becomes obligatory:

  (10) |Ek-bhii| laṛke-ne [Sita-kii   kitaab |nahĩ:| paṛh-nii/*-naa]   caah-ii/*-aa.
       one-NPI boy-ERG Sita-GEN book.F   not   read-INF.F/*-INF.M.SG want-PERF.F.SG/*-PERF.M.SG
       'Not even a single boy wanted to read Sita's book.'

  ⇒ This fact follows straightforwardly on a restructuring account: the nonfinite clause must have undergone restructuring for NPI licensing and thus is transparent for LDA.

- *Agreement controller*
    - The element controlling LDA can be a DP that cannot be referred to by a pronoun:

    (11) Mɛ̃-ne [ek-bhii kitaab nahĩ: paṛh-nii] caah-ii
          I-ERG one-NPI book.F NEG read-INF.F want-PERF.F.SG
          'I don't want to read even a single book.'

  ⇒ This fact is very problematic for the proxy-agreement account.

- *Tsez LDA*[2]
    - LDA is sensitive to the topichood of the embedded agreement controller:

    (12) a. *Long-distance agreement*
              enir   [užā magalu   b-āc'-ru-ɬi]   b -iyxo
              mother [boy bread.III.ABS III-eat-PSTPRT-NMZ].IV III-know
              'The mother knows that the bread, the boy ate.'

          b. *Local agreement*
              enir   [užā magalu   b-āc'-ru-ɬi]   r -iyxo
              mother [boy bread.III.ABS III-eat-PSTPRT-NMZ].IV IV-know
              'The mother knows the boy ate the bread.'   [*Polinsky & Potsdam 2001:584*]

    - LDA is impossible out of clauses with a complementizer:

    (13) *enir   [užā magalu   b-āc'-si-λin]   b -iyxo
           mother [boy bread.III.ABS III-eat-PST.EVID-COMP].IV III-know
           'The mother knows that the bread, the boy ate.'

    - Similar patterns: Innu-aimûn (Branigan and MacKenzie 2002) and Passamaquoddy (Bruening 2001).

- *Basque LDA*[3]
    - In the case-marked construction, the matrix auxiliary may agree in number with an embedded absolutive DP, but how this LDA is reflected depends on the case of the embedded nominalized clause:

    (14) Uko   egin d-i-∅- e -∅   [agindu horiek
          refusal(ABS) done 3.ABS-have-SG.ABS- 3PL.DAT -3SG.ERG order(s) those.PL(ABS)
          bete-tze-a-ri].
          obey-NMZ-ART-DAT
          '(S)he has refused to obey those orders.'

    - In the adpositional construction, the matrix auxiliary may agree in person and number with an embedded absolutive DP, and this LDA is always reflected as absolutive agreement:
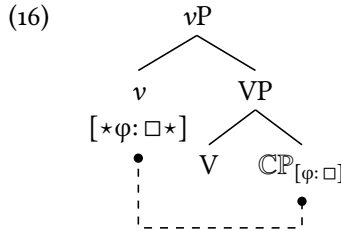
    (15) [Ni   altxa-tze-n] probatu na -∅-u-te.
          me(ABS) lift-NMZ-LOC attempted 1.ABS -SG.ABS-have-3PL.ERG
   'They attempted to lift me.'

2 Aside: Finite LDA and the WC

✳ *Proposal*
In order to maintain the strong WC, Poole (to appear) proposes that finite LDA can be analyzed as follows:[4]

1. In the matrix clause, the φ-probe agrees with $\mathbb{CP}$, which, by assumption, has unvalued φ-features:[5]

   (16)

2. In the embedded clause, the relevant DP raises to [Spec, CP] and agrees with C. As a result, the CP has the φ-features of the raised DP:

   (17)
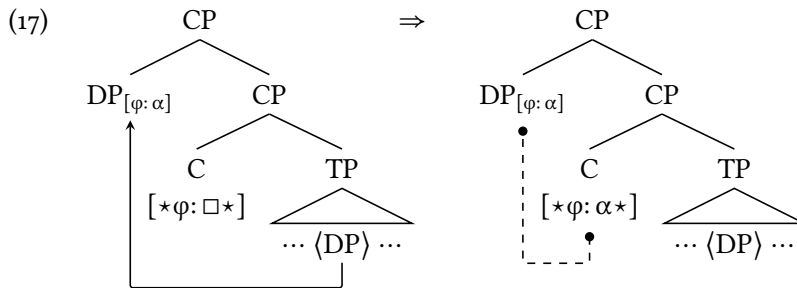
3. When the matrix clause has been built up to CP, the embedded CP is substituted in for $\mathbb{CP}$. The φ-features are transmitted to v along the existing Agree-dependencies.[6]

- This proposal is essentially a retooling of Koopman's (2006) analysis of Tsez LDA, but using Agree. There is no genuine LDA.

⇒ *Prediction*
Finite LDA should always be associated with edgehood in some fashion. To the best of my knowledge, this is generally true.

3 Deal (2017)

- ***Background on Nez Perce***
  - Nez Perce is a highly endangered Sahaptian language spoken in present-day Idaho, Washington, and Oregon.
  - It has a tripartite case system: transitive clauses have ergative subjects and accusative objects, whereas intransitive clauses have nominative subjects.
  - Agreement on the verb encodes the person and number of both the subject and the object:

    (18) *Agreement prefixes on verbs*

hi-	3rd person subject	*pe-*	plural subject
'e-	3rd person object	*nees-*	plural object
pee-	3rd person subject and 3rd person object		

⇒ Transitivity is thus realized in terms of both case and agreement.

– There is both A-scrambling and $\overline{\text{A}}$-scrambling (diagnosed by WCO and superiority). Only $\overline{\text{A}}$-scrambling may cross a finite-clause boundary.[7]

✳ *Types of attitude complementation*
DP$^{\oplus}$ = additional DP argument

(19) **Canonical pattern: Intransitive matrix clause, no DP$^{\oplus}$**
Taamsas   hi-neki-se   [$_{CP}$ Angel-nim hi-naas-wapayata-ca
Taamsas.NOM 3SUBJ-think-IMPERF [Angel-ERG 3SUBJ-O.PL-help-IMPERF
mamay'as-na].
children-ACC]
Taamsas thinks Angel is helping the children.

(20) **Prolepsis: Transitive matrix clause, DP$^{\oplus}$ bears accusative**
Taamsas-nim pee-nek-se   **Angel-ne**$^{\oplus}$ [$_{CP}$ *pro* hi-naas-wapayata-ca
Taamsas-ERG 3/3-think-IMPERF Angel-ACC [3SG 3SUBJ-O.PL-help-IMPERF
mamay'as-na].
children-ACC]
Taamsas thinks Angel is helping the children.

(21) **LDA: Transitive matrix clause, DP$^{\oplus}$ bears embedded case**[8]

   a. Harold-nim hi-**nees**-nek-se   [$_{CP}$ **hitemenew'eet**$^{\oplus}$ hi-wsiix
       Harold-ERG 3SUBJ-**O.PL**-think-IMPERF [student.NOM   3SUBJ-be.PRES.PL
       wiweepcux].
       smart   ]
       Harold thinks the students are smart.

   b. Taamsas-nim hi-**nees**-nek-se   [$_{CP}$ **mamay'as-nim**$^{\oplus}$
       Taamsas-ERG 3SUBJ-**O.PL**-think-IMPERF [children-ERG
       poo-payata-six   Angel-ne   ].
       3/3-help-IMPERF.S.PL Angel-ACC]
       Taamsas thinks the children are helping Angel.

• *Prolepsis construction*

– DP$^{\oplus}$ is in the matrix clause. It can surface anywhere in the matrix clause, and it cannot surface in an unambiguously-embedded position:

   (22) 'Aayat-onm **mamay'as-na**$^{\oplus}$ hi-nees-nek-se   [$_{CP}$ watiisx   *pro*
         woman-ERG **children-ACC**   3SUBJ-O.PL-think-IMPERF [1.day.away 3SG
         hi-pa-paay-no'   ].
         3SUBJ-S.PL-arrive-FUT]
         The woman thinks the children will arrive tomorrow.

   (23) * 'Aayat-onm hi-nees-nek-se   [$_{CP}$ watiisx   **mamay'as-na**$^{\oplus}$
         woman-ERG 3SUBJ-O.PL-think-IMPERF [1.day.away **children-ACC**
         hi-pa-paay-no'   ].
         3SUBJ-S.PL-arrive-FUT]
         Intended: the woman thinks the children will arrive tomorrow.

- The relationship between DP$^\oplus$ and the embedded bound element is *not* sensitive to islands:

(24) ? 'Aayato-nm **mamay'as-na**$_i$$^\oplus$ hi-nees-nek-se
  woman-ERG children-ACC   3SUBJ-O.PL-think-IMPERF

  [$_{CP}$ [ke kaa *pro$_i$* hi-pa-paay-no'   ], hi-lloy-no'   qiiwn   ].
  [[when 3PL 3SUBJ-S.PL-arrive-FUT], 3SUBJ-be.happy-FUT old.man.NOM]

  The woman thinks that when the kids arrive, the old man will be happy.
  lit. ≈The woman thinks the kids that when they arrive, the old man will be happy.

∗ *LDA*

- DP$^\oplus$ may not surface in an unambiguously-matrix position:

(25) * 'Aayat-onm **mamay'ac**$^\oplus$ hi-nees-nek-se   [$_{CP}$ watiisx
  woman-ERG **children.NOM** 3SUBJ-O.PL-think-IMPERF [1.day.away
  hi-pa-paay-no'   ].
  3SUBJ-S.PL-arrive-FUT]
  Intended: the woman thinks the children will arrive tomorrow.

- DP$^\oplus$ may surface to the right of embedded material:

(26) 'Aayat-onm hi-nees-nek-se   [$_{CP}$ watiisx   **mamay'ac**$^\oplus$
  woman-ERG 3SUBJ-O.PL-think-IMPERF [1.day.away **children.NOM**
  hi-pa-paay-no'   ].
  3SUBJ-S.PL-arrive-FUT]
  The woman thinks the children will arrive tomorrow.

(27) Angel-nim hi-nees-nek-se   [$_{CP}$ watiisx   Tatlo-na
  Angel-ERG 3SUBJ-O.PL-think-IMPERF [$_{CP}$ 1.day.away Tatlo-ACC
  mamay'as-nim$^\oplus$ poo-payata-si-no'   ].
  children-ERG   3/3-help-IMPERF.S.PL-FUT]
  Angel thinks the children will help Tatlo tomorrow.

⇒ Thus, unlike prolepsis, DP$^\oplus$ is in the embedded clause in the LDA construction.

- DP$^\oplus$ cannot be embedded inside an island:

(28) * 'Aayato-nm hi-nees-nek-se   [$_{CP}$ [$_{adjunct}$ ke kaa **mamay'ac**$^\oplus$
  woman-ERG 3SUBJ-O.PL-think-IMPERF [[when children.NOM
  hi-pa-paay-no'   ], hi-lloy-no'   qiiwn   ].
  3SUBJ-S.PL-arrive-FUT], 3SUBJ-be.happy-FUT old.man.NOM]
  Intended: the woman thinks that when the kids arrive, the old man will be happy.

- DP$^\oplus$ may be an embedded object, but only if it is preverbal:

(29) a. 'Aayat-onm hi-nees-nek-se   [$_{CP}$ watiisx   **mamay'as-na**$^\oplus$
    woman-ERG 3SUBJ-O.PL-think-IMPERF [$_{CP}$ 1.day.away children-ACC
    Angel-nim hi-naas-wapayata-ya   ].
    Angel-ERG 3SUBJ-O.PL-help-PERF]
    The woman thinks Angel helped the children yesterday.

  b. * Taamsas-nim hi-nees-nek-se   [$_{CP}$ Angel-nim
    Taamsas-ERG 3SUBJ-O.PL-think-IMPERF [$_{CP}$ Angel-ERG
    hi-naas-wapayata-ya   **mamay'as-na**$^\oplus$].
    3SUBJ-O.PL-help-PERF children-ACC   ]
    Taamsas thinks Angel helped the children.

- When DP$^\oplus$ occupies an $\overline{\text{A}}$-position (forced here by scrambling out of a finite clause), the LDA construction is ungrammatical:

(30) a.
Tatlo	hi-neki-se	[$_{CP}$ mamay'ac$_i$	Angel-nim	pee-$\emptyset$-ne
Tatlo.NOM	3SUBJ-think-IMPERF	[$_{CP}$ children.NOM	Angel-ERG	3/3-tell-PERF

   Harold-ne   [$_{CP}$ $_{-i}$ hi-pa-paay-no'   ]].
   Harold-ACC   [$_{CP}$ $_{-}$ 3SUBJ-S.PL-arrive-FUT]]
   Tatlo thinks that the children$_i$, Angel told Harold $_{-i}$ would arrive.

   b. * Tatlo-nm   hi-**nees**-nek-se   [$_{CP}$ **mamay'ac**$_i{}^\oplus$ Angel-nim
   Tatlo-ERG 3SUBJ-**O.PL**-think-IMPERF [$_{CP}$ **children.NOM**   Angel-ERG
   pee-$\emptyset$-ne   Harold-ne   [$_{CP}$ $_{-i}$ hi-pa-paay-no'   ]].
   3/3-tell-PERF Harold-ACC   [$_{CP}$ $_{-}$ 3SUBJ-S.PL-arrive-FUT]]
   Intended: Tatlo thinks that the children$_i$, Angel told Harold $_{-i}$ would arrive.

* *Analysis*
DP$^\oplus$ covertly hyperraises out of the embedded finite clause into the matrix object position, from where v agrees with it in the ordinary local fashion:

(31)
$$[\,_v\ [_{VP}\ \text{children think}\ [_{CP}\ [_{TP}\ \text{ADV}\ [_{TP}\ \text{children T}\ [_{vP}\ \text{Angel help children}\ ]]]]]]$$
covert (hyper)raising — overt A-scrambling — Agree

- **Semantics of the LDA construction**[9]

  - LDA only allows a transparent (i.e. *de re*) reading of DP$^\oplus$ w.r.t. the embedding attitude predicate:[10]

    (32) a. **Transparent context**
       Context: My neighbor Mary sees a cat catching a magpie. It turns out it was my cat, Calvin, but Mary doesn't know that. She just tells me about the fight and what the cat looked like. When I get home, Calvin is there and he's all dirty and messed up. To explain what happened I say:

       Mary-nim pee-nek-se   [**Calvin-nim**$^\oplus$ pee-cepeqick-e 'ek'eex-ne   ].
       Mary-ERG 3/3-think-TAM [Calvin-ERG   3/3-catch-TAM magpie-ACC]
       Mary thinks Calvin caught a magpie.

    b. **Opaque context**
       Context: John doesn't know that all ravens are black. He thinks that a white raven was flying around outside.

       # *pro* pee-nek-se   [**x̂ayx̂ayx̂**   **qooqox̂**
       3SG 3/3-think-IMPERF [white.NOM raven.NOM
       hi-weyixnik-sa-qa   ]
       3SUBJ-fly.around-IMPERF-REC.PAST]
       Intended: he thinks [a white raven]$_{opaque}$ was flying around.

⇒ The LF produced by covert hyperraising is essentially the classical *res*-movement LF, hence the obligatory *de re* reading.

- **Discussion**

  - Poole (to appear) claims that the LDA construction in Nez Perce can be captured in the same manner as Tsez LDA (see above):

    * The matrix predicate agrees with $\mathbb{CP}$.

    * Within the embedded CP, DP$^\oplus$ raises to [Spec, CP] and passes its φ-features up to CP.

[9] Deal (2018)

[10] The same restriction holds of prolepsis.

- The embedded CP is substituted in when the matrix clause is built up to CP.
  - The features of $DP^{\oplus}$ are shared across the existing Agree-dependencies.

- On this analysis, however, movement to embedded [Spec, CP] would need to be limited to A-movement in Nez Perce.[11]

- Deal rejects a Tsez-style analysis on the grounds that $DP^{\oplus}$ cannot be in an $\overline{A}$-position, but this assumes that the edge position could not be an A-position.

- Deal does not provide any explicit evidence that $DP^{\oplus}$ raises (covertly) into the matrix clause, e.g. Condition B.

- The *de re* requirement could be handled on an edge-based account if we assume that the modality associated with the attitude predicate is in fact part of the embedded left periphery.[12] Movement to the edge would then place $DP^{\oplus}$ outside the scope of the modality, thereby forcing a *de re* reading.

[11] In line with what Zyman (2017) and Fong (2019) propose for P'urhepecha and Mongolian respectively.

[12] Kratzer (2013); Moulton (2009); Bogal-Allbritten (2016)

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