Indexical shift in Armenian: evidence from and for binding

David Blunier

Cyprus Undergraduate Linguistics Conference
November 28-29, 2020
Outline

1 Indexical shift
   - The phenomenon
   - Two theories of indexical shift

2 Eastern Armenian data
   - Multiple-embeddings configurations
   - Split-antecedence
   - A constraint on argument structure

3 The proposal: constrained context-binding
   - Solving problem 1
   - Solving problem 2
   - Solving problem 3

4 Conclusions
Outline

1. Indexical shift
   - The phenomenon
   - Two theories of indexical shift

2. Eastern Armenian data

3. The proposal: constrained context-binding

4. Conclusions
Indexicals are context-dependent elements used to refer to different coordinates of the context of utterance:
Indexicals are context-dependent elements used to refer to different coordinates of the context of utterance:

\[ I, \text{ you, here, now, actually } \]
\[ sp^c, ad^c, loc^c, t^c, w^c \]
Indexicals

- Indexicals are context-dependent elements used to refer to different coordinates of the context of utterance:

  **Indexicals**

  *I, you, here, now, actually*

  \( sp^c, ad^c, loc^c, t^c, w^c \)

- As emphasized by Kaplan (1989), indexicals are **rigid designators** (in the sense of Kripke (1972)) that **refer directly** to an object in the actual context.
Indexicals

- A consequence of rigid designation is the fact that indexicals cannot be ‘intensionalized’, i.e. they systematically leap out of any sentential operators:

(1)  
   a. Last year in Pakistan, everyone who was there then was kidnapped.  
      ⇝ The people in Pakistan last year were kidnapped  
   b. Last year in Pakistan, everyone who was here now was kidnapped.  
      ⇝ The people in this room were kidnapped last year
Indexicals

A consequence of rigid designation is the fact that indexicals cannot be ‘intensionalized’, i.e. they systematically leap out of any sentential operators:

(1) a. Last year in Pakistan, everyone who was there then was kidnapped.  
   \[ \rightsquigarrow \text{The people in Pakistan last year were kidnapped} \]

   b. Last year in Pakistan, everyone who was here now was kidnapped.  
      \[ \rightsquigarrow \text{The people in this room were kidnapped last year} \]

(2) a. During conferences, the current speaker is extremely boring.  
   \[ \rightsquigarrow \text{speaker covaries with conferences} \]

   b. During conferences, I am extremely boring.  
      \[ \rightsquigarrow \text{I, David, am an extremely boring person} \]
But, as first noted by Schlenker (1999) and popularized by Anand and Nevins (2004), it seems that one can find shifted indexicals in natural languages:

(3) ǰon ǰɵga nə-ǹǔ yil-all
John hero be.1SG.O 3SG-MASC.say-AUX.3SG-MASC
✓ ‘John says that I am a hero’
✓ ‘Johnᵢ says that heᵢ is a hero’

(Amharic: Schlenker 1999)

(4) Heseniᵢ miᵢ-ra va kɛ ɛzᵢ/k dɛwletia
Hesen.OBL I.OBL-did say that I rich.be-PRES
‘Hesen told meᵢ that Iᵢ am rich’
‘Hesen told meᵢ that heᵢ is rich’

(Zazaki: Anand and Nevins 2004)
Properties of indexical shift (I)

- Pervasive across languages (26 reported, pertaining to 19 families, including sign languages)

*Sundaresan 2018 for an overview*
Properties of indexical shift (I)

- Pervasive across languages (26 reported, pertaining to 19 families, including sign languages)
  
  **Sundaresan 2018 for an overview**

- Not an instance of quotation: wh-extraction is possible from shifted embedded clauses, and NPIs typically are licensed in the same environments. As opaque structures, quotations typically rule out these configurations

  **Schlenker 2003, Anand 2006, Deal 2020 i.a.; but see Maier (2007) for contrasting views**
Properties of indexical shift (I)

- Pervasive across languages (26 reported, pertaining to 19 families, including sign languages)

**Sundaresan 2018 for an overview**

- Not an instance of quotation: wh-extraction is possible from shifted embedded clauses, and NPIs typically are licensed in the same environments. As opaque structures, quotations typically rule out these configurations

**Schlenker 2003, Anand 2006, Deal 2020 i.a.; but see Maier (2007) for contrasting views**

- Restricted to attitude reports environments: shifting occurs mostly under say and tell, while less languages allow shifting under think and know, possibly forming an implicative hierarchy

**Deal 2017, Sundaresan 2018, Wurmbrand 2018**
First theory: monster operator

- In this view, the shift is not induced by the attitude verb itself, but by a so-called *monster operator* (MO) after Kaplan (1989).

First theory: monster operator

- In this view, the shift is not induced by the attitude verb itself, but by a so-called *monster operator* (MO) after Kaplan (1989).


- The MO is a **context-shifting** operator: it is introduced via an attitude verb and turns the context coordinates of the embedded clause into the coordinates of its index:

\[
\text{The monster operator } \mathcal{M}
\]

\[
[\mathcal{M} \phi ]^{c,i} = [ \phi ]^{i,i} = 1
\]
In this view, the shift is not induced by the attitude verb itself, but by a so-called *monster operator* (MO) after Kaplan (1989).

The MO is a **context-shifting** operator: it is introduced via an attitude verb and turns the context coordinates of the embedded clause into the coordinates of its index:

\[
\begin{align*}
\text{The monster operator } &\phantom{=} \text{Monster operator} \\
\left[ \text{Monster operator} \phi \right]_{c,i} &\phantom{=} \left[ \phi \right]_{i,i} = 1
\end{align*}
\]

The context variables that refer to the original context of utterance are thus **rewritten** with those of the index, i.e. the variables whose value are computed against the reported context introduced by the embedded clause.
This analysis straightforwardly captures the following restriction, illustrated here with an example in Zazaki:

(5)  
\[
\text{Vizeri Rojda Bill-ra va Kē ēz to-ra miradiša} \\
\text{Yesterday Rojda Bill-to say-PST that I you-to angry.be-PRES} \\
\checkmark \text{ ‘Yesterday Rojda}_i \text{ told Bill}_j \text{ that he}_i \text{ was mad at him}_j' \\
\checkmark \text{ ‘Yesterday Rojda}_i \text{ told Bill}_j \text{ that I speak was mad at you}_{\text{addr}}' \\
\times \text{ ‘Yesterday Rojda}_i \text{ told Bill}_j \text{ that I speak was mad at him}_j' \\
\times \text{ ‘Yesterday Rojda}_i \text{ told Bill}_j \text{ that he}_i \text{ was mad at you}_{\text{addr}}' \\
\]

(Anand and Nevins, 2004)
Indexicals can only get their reference from a single context: if the context have been shifted (due to the presence of a monster), then the matrix context is not available anymore. This is shift together.
First theory: monster operator

- Indexicals can only get their reference from a single context: if the context have been shifted (due to the presence of a monster), then the matrix context is not available anymore. This is shift together.
- The monster approach correctly predicts this: once the parameters of the context have been replaced by those of the index, it is not available to the computation anymore, and indexicals receive a shifted interpretation.
First theory: monster operator

- It has been demonstrated for various languages that shift together is too strong a constraint: it *might*, but *must not*, hold in many attested ‘shifty’ languages.

  Tamil (Sundaresan, 2012), (Sundaresan, 2018), Mishar Tatar (Podobryaev, 2014), Telugu (Messick, 2017), (Messick, 2020), Catalan Sign Language (Quer, 2005), (Blunier and Zorzi, 2020), German Sign Language (Hübl, 2013), i.a.

- In some languages, the utterance context remains accessible even when one or more indexicals are shifted, arguing against a ‘context rewriting’ approach

  Korean (Pak et al., 2008), Slovenian (Stegovec and Kaufmann, 2015)
Second theory: the binding approach

- Since IS occurs only in attitude environments (introduced by an attitude verb), Schlenker (1999) proposes to treat attitude verbs as quantifiers over contexts.
Second theory: the binding approach

- Since IS occurs only in attitude environments (introduced by an attitude verb), Schlenker (1999) proposes to treat attitude verbs as quantifiers over contexts.

- Crucially, this option requires context variables to be present in the syntax, just like individual variables $x,y...$ and world variables $w_1, w_2...$, as proposed by Percus (2000) a.o.
Since IS occurs only in attitude environments (introduced by an attitude verb), Schlenker (1999) proposes to treat attitude verbs as quantifiers over contexts.

Crucially, this option requires context variables to be present in the syntax, just like individual variables \( x, y \ldots \) and world variables \( w_1, w_2 \ldots \), as proposed by Percus (2000) a.o.

Attitude verbs have the ability to bind the context variable that comes along with the indexical pronoun, yielding the two possible readings for (6):

(6) \( \ddot{\text{jon}} \, \ddot{\text{jəgna}} \, \text{nə-\text{nēn}} \, \text{yil-all} \)

John hero be.PF-1SGo 3SG-MASC.say-AUX.3SG-MASC

John\(_{i}\) said \( \lambda_c \) that \( l_c^{i} \) am a hero (shifted, bound reading)

\( c \) John said that \( l_{s(c)} \) am a hero (unshifted, free reading)

Amharic: Schlenker 1999
Outline

1. Indexical shift

2. Eastern Armenian data
   - Multiple-embeddings configurations
   - Split-antecedence
   - A constraint on argument structure

3. The proposal: constrained context-binding

4. Conclusions
Modern Eastern Armenian (Indo-European: Armenia, Yerevan region) allows optional indexical shift (7):

(7) Mariam-ու Mariam-nə
    ասել-է asəl-a
    ուր ուր (և) ur ur (և)
    հաջել-էm hajjeł-em

Mariam.nom-def say.pst-3sg comp 1sg win.pst-1sg

✓ "Mariam said that I won" (indexical)
✓ "Mariamᵢ said that sheᵢ won" (shifted)
Modern Eastern Armenian (Indo-European: Armenia, Yerevan region) allows optional indexical shift (7):

\[(7) \quad \text{Mariam-nə asəl-a վեր (jəs) haytəl-em}
\]
\[\text{Mariam.nom-def say.pst-3sg comp 1sg win.pst-1sg}\]

✓ "Mariam said that I won" (indexical)
✓ "Mariam\textsubscript{i} said that she\textsubscript{i} won" (shifted)

A number of ‘shifty configurations’ in MEA, to which we now turn, challenge the operator-based approach in significant ways.
Problem 1: multiple embeddings

- In multiple embedded constructions, indexicals in MEA must receive their value from the closest ”shifty” C-domain:

(8) Samuel-ə asəl-a Anna-in əj Narek-ə Mariam-in
    Samuel.nom-def say.pst-3sg Anna.dat comp Narek.nom-def Mariam.dat
    asəl-a əj (jəs) kez sirum-em
    say.pst-3sg comp 1sg 2sg love.ptcp.prs-1sg

✓ ‘Samuel$_i$ said to Anna$_j$ that Narek$_k$ said to Mariam$_m$ that he$_k$ loves her$_m$’

✗ ‘Samuel$_i$ said to Anna$_j$ that Narek$_k$ said to Mariam$_m$ that he$_i$ loves her$_j$’

- The operator-based approach would predict an intermediate shifted reading, where the ☹ is inserted by the highest attitude verb: however, this reading is unavailable.
Problem 1: multiple embeddings

- In multiple embedded constructions, indexicals in MEA must receive their value from the closest ”shifty” C-domain:

(8) Samuel-ə asel-a Anna-in ər Narek-ə Mariam-in
    Samuel.nom-def say.pst-3sg Anna.dat comp Narek.nom-def Mariam.dat
    asel-a ər (jəs) kez sirum-em
    say.pst-3sg comp 1sg 2sg love.ptcp.prs-1sg

✓ ‘Samuel$_i$ said to Anna$_j$ that Narek$_k$ said to Mariam$_m$ that he$_k$ loves her$_m$’
✗ ‘Samuel$_i$ said to Anna$_j$ that Narek$_k$ said to Mariam$_m$ that he$_i$ loves her$_j$’

- The operator-based approach would predict an intermediate shifted reading, where the 😈 is inserted by the highest attitude verb: however, this reading is unavailable.
- The binding approach similarly overgenerates in predicting the same reading, since nothing in principle prevents the two indexicals of being bound by the topmost $\lambda$-binder.
Another problem for the operator-based approach is the availability of shifted readings of plural indexicals referring to two coordinated DPs in the matrix clause:

\[(9) \quad \text{Anna-n} \quad u \quad \text{Mariam-э} \quad \text{асэл-ён} \quad \text{тё} \quad \text{гналу}
\]

\text{Anna.nom-def} \quad \text{and} \quad \text{Mariam.nom-def} \quad \text{say.pst-3pl} \quad \text{comp} \quad \text{go.ptcp-fut}

\text{enk} \quad \text{кёфи} \quad \text{миясин}

\text{be.prs.1pl} \quad \text{party.dat} \quad \text{together}

✓ \text{Anna}_i \quad \text{and} \quad \text{Mariam}_j \quad \text{said} \quad \text{that} \quad \text{we}_i,j \quad \text{will} \quad \text{go} \quad \text{to} \quad \text{the} \quad \text{party} \quad \text{together}.
Problem 2: split-antecedence

Another problem for the operator-based approach is the availability of shifted readings of plural indexicals referring to two coordinated DPs in the matrix clause:

(9) Anna-n u Mariam-σ asəl-ən te gnnalu
    Anna.nom-def and Mariam.nom-def say.pst-3pl comp go.ptcp-fut
    enk kefi miasin
    be.prs.1pl party.dat together
✓ Anna_{i} and Mariam_{j} said that we_{i,j} will go to the party together.

The preferred reading for this sentence is a dependent one (Beck and Sauerland, 2000), whereby Anna and Mariam each said something like ‘I will go to the party with Anna/Mariam’ (a group reading is not excluded, but dispreferred).
Preference for the dependent reading of plural *enk* is expected under the assumption that shifted indexicals (like their non shifted counterparts) are interpreted *de se* (Anand, 2006): each speaker $x$ attributes to herself the property $P$ such that $x$ will go to the party with $y$ (and $x \neq y$).
Preference for the dependent reading of plural *enk* is expected under the assumption that shifted indexicals (like their non shifted counterparts) are interpreted *de se* (Anand, 2006): each speaker *x* attributes to herself the property *P* such that *x* will go to the party with *y* (and *x* ≠ *y*).

This is a problem for the operator-based approach, since the speaker parameter *sp(c)* is not a plurality of individuals in the original context of utterance.
Problem 2: split-antecedence

- Preference for the dependent reading of plural *enk* is expected under the assumption that shifted indexicals (like their non shifted counterparts) are interpreted *de se* (Anand, 2006): each speaker $x$ attributes to herself the property $P$ such that $x$ will go to the party with $y$ (and $x \neq y$).

- This is a problem for the operator-based approach, since the speaker parameter $sp(c)$ is not a plurality of individuals in the original context of utterance.

- In fact, the presence of a plural feature [+PL] seems to suggest that the shifting mechanism ranges over two different speech acts, but not one.
Problem 3: argument realization

- A final problem for the operator-based approach - first noted by Özyıldız (2012) for Turkish -, concerns accessibility of potential referents for indexicals.
Problem 3: argument realization

- A final problem for the operator-based approach - first noted by Özyıldız (2012) for Turkish -, concerns accessibility of potential referents for indexicals.
- (10) shows that, when a first person and second person indexicals pronouns are shifted in the same embedded clause, their corresponding referents are both realized as matrix DPs subject and object, respectively:

(10) Annai manman asêl-ə Anna-in uð du pêtk-ə indʒ
   Anna.gen mom say.prs-3sg Anna.dat comp you.nom need-cop me.dat
   ognəs tun-ə makrelu hamar
   help-prs.2sg house-def clean-ptcp.fut for

✓ ‘Anna’s mother said to Anna that you should help me with the cleaning’ (indexical)
✓ ‘Anna’s mother said to Anna that she should help her with the cleaning’ (shifted)
If this is not the case, indexicals must refer to the utterance context participants: in (15), the 2SG indexical agreement marking $\varepsilon s$ can only refer to the actual addressee, not to Anna (the addressee of the reported context).

(11)  Annai maman asel-ə vɔŋ du pεtk-ə indʒ
     Anna.gen mom say.prs-3SG comp you.nom need-need-cop me.dat
     ognɔεs tun-ə makrelu hamar
     help-prs.2sg house-def clean-ptcp.fut for

✓ ‘Anna’s mother said that you should help me with the cleaning’
(indexical)

✗ Anna$_j$’s mother$_i$ said that she$_j$ should help her$_i$ with the cleaning.
Outline

1. Indexical shift
2. Eastern Armenian data
3. The proposal: constrained context-binding
   • Solving problem 1
   • Solving problem 2
   • Solving problem 3
4. Conclusions
I suggest that adopting Schlenker’s 2003 binding approach (or a modified version thereof) provides a solution for the problems mentioned above.
I suggest that adopting Schlenker’s 2003 binding approach (or a modified version thereof) provides a solution for the problems mentioned above.

I will assess the three problems in turn and argue for an interface solution, according to which grammar is context-sensitive in a fine-grained fashion.
Putting it all together: local binding and a new constraint on arguments

- I suggest that adopting Schlenker’s 2003 binding approach (or a modified version thereof) provides a solution for the problems mentioned above.

- I will assess the three problems in turn and argue for an interface solution, according to which grammar is context-sensitive in a fine-grained fashion.

- The solution crucially hinges on two constraints: one grammatical - a type of relativized minimality in the sense of Rizzi (1990) and another of a more pragmatic type, that forces indexical reference to be resolved locally rather than globally (at the level of the utterance).
Recall that the binding approach falls short in accounting for cascaded embeddings like (12) below:

(12) Samuel-ə asəl-a Anna-in vər Narek-ə Mariam-in
    Samuel.nom-def say.pst-3sg Anna.dat comp Narek.nom-def Mariam.dat
    asəl-a vər (jēs) kez sirum-em
    say.pst-3sg comp 1sg 2sg love.ptcp.prs-1sg

✓ ‘Samuel<sub>i</sub> said to Anna<sub>j</sub> that Narek<sub>k</sub> said to Mariam<sub>m</sub> that he<sub>k</sub> loves her<sub>m</sub>’

✗ ‘Samuel<sub>i</sub> said to Anna<sub>j</sub> that Narek<sub>k</sub> said to Mariam<sub>m</sub> that he<sub>i</sub> loves her<sub>j</sub>’
Solving problem 1: local binding

- Recall that the binding approach falls short in accounting for cascaded embeddings like (12) below:

(12) Samuel-ǝ asǝl-a Anna-in ǝɾ Narek-ǝ Mariam-in
    Samuel.nom-def say.pst-3SG Anna.dat comp Narek.nom-def Mariam.dat

    asǝl-a ǝɾ (jǝs) kez sirum-ǝm
    say.pst-3SG comp 1SG 2SG love.ptcp.prs-1SG

✓ ‘Samuel, said to Anna that Narek said to Mariam that he loves her.’

✗ ‘Samuel, said to Anna that Narek said to Mariam that he loves her.’

- In order to prevent this, we need to provide the theory with a principled way of ‘blocking’ the intermediate reading, i.e. enforce closest binding.
Adopting a version of Rizzi’s (1990, ?) relativized minimality to context, we can correctly derive the possible readings for (12): indexicals must be bound by the closest $\lambda$-binder.

**Context-relativized minimality (Sundaresan, 2018)**

In a configuration in which $\Phi$ and $\Psi$ are indexicals of the same category,

\[
\lambda c...\Phi...\lambda c'...\Psi...
\]

$\Phi$ and $\Psi$ must be bound by the closest context-$\lambda$-abstractor.
Recall that the second problem had to do with the referential value of indexicals, which we assume are inherently singular in our example:

(14) Anna-n u Mariam-ə asəl-ən te gnalu
    Anna.nom-def and Mariam.nom-def say.pst-3pl comp go.ptcp-fut
    enk kefi miasin
    be.prs.1pl party.dat together

✓ Anna_{i} and Mariam_{j} said that we_{i,j} will go to the party together.
We can solve this problem with our binding framework by assuming that in that case, indexical *we* actually denotes a set of variables ranging over the speakers of multiple contexts.
We can solve this problem with our binding framework by assuming that in that case, indexical *we* actually denotes a set of variables ranging over the speakers of multiple contexts.

A distributive operator ensures that the dependent reading of say obtains, and returns ‘true’ if any member of the variable set \{Anna, Mariam\} each said ‘I’ll go to the party’.

*Rullmann (2003), Rullmann (2004), LaTerza et al. (2014), LaTerza et al. (2015)*
What about the absence of a shifted reading for an indexical whose binder is not present as a full DP in the matrix clause?

(15) Annai  maman  ašel-ə  vər  du  pətk-ə  ind3
   Anna.gen  mom  say.prs-3sg  comp  you.nom  needneed-cop  me.dat
   ognəs  tun-ə  makrelu  hamar
   help-prs.2sg  house-def  clean-ptcp.fut  for

✓ ‘Anna’s mother said that you should help me with the cleaning’
(indexical)
✗ Anna_j’s mother_i said that she_j should help her_i with the cleaning.
Solving problem 3: argument realization

- We propose that this is achieved through the application of another constraint on **argument realization**:

  1. Solve reference globally!
  2. In a shifty language, indexical reference is resolved at the grammatical level when it can, i.e. when to each indexical bindee corresponds a binder that is in the right configuration (obeys context-relativized minimality); and is indexed to an argument in the matrix clause that matches the indexical Θ-role.

  If 1-2 do not obtain, indexical reference is resolved against the utterance context.

  The constraint operates on both grammatical and pragmatic levels: during the processing/parsing of the sentence, indexical will be resolved against the local (grammatical) context if it can; if not, speakers and hearers will resolve indexical reference against the utterance context.
We propose that this is achieved through the application of another constraint on argument realization:

**Solve reference globally!**

In a shifty language, indexical reference is resolved at the grammatical level when it can, i.e. when to each indexical bindee corresponds a binder that

1. is in the right configuration (obeys context-relativized minimality); and
We propose that this is achieved through the application of another constraint on **argument realization**: 

**Solve reference globally!**

In a shifty language, indexical reference is resolved at the grammatical level when it can, i.e. when to each indexical bindee corresponds a binder that

1. is in the right configuration (obeys context-relativized minimality); and

2. is indexed to an argument in the matrix clause that matches the indexical Θ-role.

If 1-2 do not obtain, indexical reference is resolved against the utterance context.
Solving problem 3: argument realization

- We propose that this is achieved through the application of another constraint on **argument realization**:

**Solve reference globally!**

In a shifty language, indexical reference is resolved at the grammatical level when it can, i.e. when to each indexical bindee corresponds a binder that

1. is in the right configuration (obeys context-relativized minimality); and

2. is indexed to an argument in the matrix clause that matches the indexical $\Theta$-role.

If 1-2 do not obtain, indexical reference is resolved against the utterance context.

- The constraint operates on both grammatical and pragmatic levels: during the processing/parsing of the sentence, indexical will be resolved against the local (grammatical) context if it can; if not, speakers and hearers will resolve indexical reference against the utterance context.
This seems supported by retrievability constraints on reference in other domains, as in ellipsis: preference is given to linguistic antecedents to resolve anaphoric dependencies in elided contexts.
Solving problem 3: argument realization

- This seems supported by retrievability constraints on reference in other domains, as in ellipsis: preference is given to linguistic antecedents to resolve anaphoric dependencies in elided contexts.
- Furthermore, ellipsis sites are sensitive to the grammatical structure of their antecedent (16):

  (16) The garbage needed to be taken out.
  a. John did it.
  b. *John did.

  (17) Someone took out the garbage.
  a. John did it.
  b. John did. (Hankamer and Sag, 1976)
Solving problem 3: argument realization

- This seems supported by retrievability constraints on reference in other domains, as in ellipsis: preference is given to linguistic antecedents to resolve anaphoric dependencies in elided contexts.
- Furthermore, ellipsis sites are sensitive to the grammatical structure of their antecedent (16):

(16) The garbage needed to be taken out.
   a. John did it.
   b. *John did.

(17) Someone took out the garbage.
   a. John did it.
   b. John did. (Hankamer and Sag, 1976)
Solving problem 3: argument realization

- This is consistent with other findings about ellipsis processing: the parser will likely consult immediately preceding linguistics antecedent before consulting discourse-available information.

_Frazier & Clifton 2000, 2005, Arregui et al. (2006) i.a._
Solving problem 3: argument realization

- This is consistent with other findings about ellipsis processing: the parser will likely consult immediately preceding linguistics antecedent before consulting discourse-available information.


- Analogous results have been observed in studies about pronominal reference, according to which parallelism and thematic roles are more important factors in determining pronominal reference than mere discourse saliency or recency.

Terken and Hirschberg (1994), Smyth (1994)
Outline

1. Indexical shift
2. Eastern Armenian data
3. The proposal: constrained context-binding
4. Conclusions
Conclusions

- The operator-based approach does not predict the behavior of indexicals in multiple embeddings and thus undergenerates.
Conclusions

- The operator-based approach does not predict the behavior of indexicals in multiple embeddings and thus undergenerates.
- Because indexicals are still considered to be directly referential under the OP theory, it cannot account for split-antecedence configurations and for mixed readings involving indexicals referring to different contexts (and thus violating the shift-together effect).
Conclusions

- The operator-based approach does not predict the behavior of indexicals in multiple embeddings and thus undergenerates.
- Because indexicals are still considered to be directly referential under the OP theory, it cannot account for split-antecedence configurations and for mixed readings involving indexicals referring to different contexts (and thus violating the shift-together effect).
- An approach in terms of binding can account for the data, if it is provided with i) a locality constraint on binders and ii) a constraint on the availability of arguments that can serve as potential antecedents for shifted indexicals.
Thank You!

Feedback much welcome: david.blunier@unige.ch


