What can understudied languages teach us about syntax?
What can understudied languages teach us about syntax?

*today's answer:*
more than I can describe in 20 minutes...
some random, anonymized bits of slander:

'...it's a poke in the eye for Chomsky and his stupid theory of universals, which implies that there's no need studying any language but your own because they're all basically the same anyway.'

'...most cognitive scientists, linguists included, speak only the familiar European languages...'
Wôpanâak  Maliseet
Atayal  Kisêdjê
Zulu  Mbya
Chol  Tlingit
An issue for today: Agree
An issue for today: Agree

• when does this happen?
An issue for today: Agree

• when does this happen?
• why does it happen?
An issue for today: Agree

- when does this happen?
- why does it happen?

(would anything bad happen if it didn't?)
Lardil
(Tangkic, Northern Australia)
## Lardil preliminaries

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### Lardil preliminaries

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<th>Word</th>
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Lardil preliminaries

miyar 'spear-NOM'
miyar-in 'spear-ACC'
miyar-kan 'spear-GEN'
miyar-ur 'spear-INSTR'

dilmirrur 'dugong-NOM' balibal 'stingray sp.'
dilmirruru-n 'dugong-ACC' balibali-n '…-ACC'
dilmirruru-kan 'dugong-GEN' balibali-kan '…-GEN'
dilmirruru-r 'dugong-INSTR' balibali-wur '…-INSTR'

truncation
Lardil preliminaries

miyar   'spear-NOM'
miyar-i(n) 'spear-ACC'
miyar-kan 'spear-GEN'
miyar-ur  'spear-INSTR'
dilmirrur 'dugong-NOM' balibal  'stingray sp.'
dilmirrur u-(n) 'dugong-ACC' balibali-i(n) '…-ACC'
dilmirrur u-kan 'dugong-GEN' balibali-kan '…-GEN'
dilmirrur u-r 'dugong-INSTR' balibali-i-wur '…-INSTR'

truncation
Lardil preliminaries

miyar      'spear-NOM'
miyar-i(n) 'spear-ACC'
miyar-kan  'spear-GEN'
miyar-u(r) 'spear-INSTR'

dilmirrur  'dugong-NOM' balibal  'stingray sp.'
dilmirrur u-(n) 'dugong-ACC' balibali-i(n) '…-ACC'
dilmirrur u-kan 'dugong-GEN' balibali-kan '…-GEN'
dilmirrur u-(r) 'dugong-INSTR' balibali-i-wu(r) '…-INSTR'

truncation
Lardil preliminaries

miyar  'spear-NOM'
miyar-i(n)  'spear-ACC'
miyar-kan  'spear-GEN'
miyar-u(r)  'spear-INSTR'

• we discover underlying forms by adding inflection

• inflection is sometimes null

dilmirrur  'dugong-NOM'  balibal  'stingray sp.'
dilmirruru-(n)  'dugong-ACC'  balibali-(n)  '…-ACC'
dilmirruru-kan  'dugong-GEN'  balibali-kan  '…-GEN'
dilmirruru-(r)  'dugong-INSTR'  balibali-wu(r)  '…-INSTR'

truncation
Lardil concord processes
• DP-internal

Ngada derlde marun-ngan-i miyar-i
I break boy-GEN-ACC spear-ACC
'I broke the boy's spear'
Lardil concord processes
• DP-internal

Ngada derlde marun-ngan-i miyar-i
I break boy-GEN-ACC spear-ACC
'I broke the boy's spear'

Marun-ngan miyar derlde-e
boy-GEN spear break-PASS
'The boy's spear was broken'
**Lardil concord processes**

- DP-internal

Ngada derlde marun-ngan-ι miyar-ι
I break boy-GEN-ACC spear-ACC
'I broke the boy's spear'

Marun-ngan miyar derlde-e
boy-GEN spear break-PASS
'The boy's spear was broken'

Derlde-wala marun-ngan miyar break-just boy-GEN spear
'Just break the boy's spear'

- 3rd person objects of imperatives are NOM
Lardil concord processes
• DP-internal

Nyingki kurri thungal-i [ ngithun-i  kirdi-thuru-Ø]
you see tree-ACC  I.GEN-ACC cut-FUT-ACC
'You saw the tree which I will cut down'
Lardil concord processes
- DP-internal

Nyingki kurri thungal-\textit{i} [ngithubi\textunderscore{\textit{i}} kirdi-thuru-\textit{Ø}]
you see\textunderscore{ACC} I.\textit{GEN-ACC} cut-FUT-\textit{ACC}
'You saw the tree which I will cut down'

Kurri-wala thungal [ngithubi kirdi-thur]
see-just tree I.\textit{GEN} cut-FUT
'Just look at the tree which I will cut down'
Lardil concord processes
• DP-internal
• Tense concord

Ngada nguthungu warnawu liban-i
I slowly cook pumpkinhead-ACC
'I slowly cooked the pumpkinhead'
Lardil concord processes
- DP-internal
- Tense concord

Ngada nguthungu warnawu liban-i
I slowly cook pumpkinhead-ACC
'I slowly cooked the pumpkinhead'

Ngada nguthunguthu-r warnawu-thur liban-kur
I slowly-FUT cook-FUT pumpkinhead-FUT
'I will slowly cook the pumpkinhead'
Lardil concord processes
• DP-internal
• Tense concord

Ngada netha yak-*in* birnkil-ur
I hit fish*-ACC* fishing.spear*-INSTR
'I hit the fish with a fishing spear'
Lardil concord processes
• DP-internal
• Tense concord

Ngada netha yak-*in* birnkil-*ur*
I hit fish-*ACC* fishing.spear-*INSTR*
'I hit the fish with a fishing spear'

Ngada ne-*thur* yak-*ur* birnkil-uru-*r*
I hit-*FUT* fish-*FUT* fishing.spear-*INSTR-*FUT*
'I will hit the fish with a fishing spear'
Lardil concord processes
• DP-internal
• Tense concord

Ngada netha yak-in birnkil-ur
I hit fish-ACC fishing.spear-INSTR
'I hit the fish with a fishing spear'

Ngada ne-thur yak-ur birnkil-uru-r
I hit-FUT fish-FUT fishing.spear-INSTR-FUT
'I will hit the fish with a fishing spear'

FUT replaces ACC but not INSTR
Lardil concord processes
We really do want to think of FUT as 'replacing' ACC:

Ngada kurri-thur karnjin-kur
I see-FUT wallaby-FUT
[ ngithun thabuji-kan-i la-tharrba-Ø ]
my older.brother-GEN-ACC spear-NONFUT-ACC
'I want to see the wallaby
that my older brother speared'
(Hale 1997, 44)
**Lardil concord processes**
We really do want to think of FUT as 'replacing' ACC:

Ngada kurri-*thur* karnjin-*kur*
I see-FUT wallaby-FUT
[ ngithun thabuji-kan-*i* la-tharrba-Ø ]
my older.brother-GEN-ACC spear-NONFUT-ACC
'I want to see the wallaby
that my older brother speared'
(Hale 1997, 44)

→ FUT doesn't spread to relative clause,
so we see the underlying ACC there.
Lardil concord processes
We really do want to think of FUT as 'replacing' ACC…
…just when FUT is assigned after ACC:

Kangka-wala marun [luuli-thur]!
tell-just boy.NOM dance-FUT
'Just tell the boy to dance!'
Lardil concord processes
We really do want to think of FUT as 'replacing' ACC… …just when FUT is assigned after ACC:

Kangka-wala marun [luuli-thur]!
tell-just boy.NOM dance-FUT
'Just tell the boy to dance!' 

Ngada kangka marun-[luuli-thuru-Ø]
I tell boy-ACC dance-FUT-ACC
'I told the boy to dance'
Lardil concord processes
We really do want to think of FUT as 'replacing' ACC…
…just when FUT is assigned after ACC:

Kangka-wala marun [luuli-thur]!
tell-just boy.NOM dance-FUT
'Just tell the boy to dance!'  

Ngada kangka marun-i [luuli-thuru-Ø] FUT-ACC
I tell boy-ACC dance-FUT-ACC
'I told the boy to dance'

Ngada kurri-thur karnjin-kur ACC-FUT
I see-FUT wallaby-FUT
'I want to see the wallaby'
Lardil concord processes

We really do want to think of FUT as 'replacing' ACC…
…just when FUT is assigned after ACC:

Ngada kangka marun-*i* [ luuli-*thuru-*Ø]  FUT-ACC
I tell boy-ACC dance-FUT-ACC
'I told the boy to dance'

Ngada kurri-*thur* karnjin-*kur*  ACC-FUT
I see-FUT wallaby-FUT
'I want to see the wallaby'

ACC assigned *before* FUT Tense concord.
Lardil concord processes
We really do want to think of FUT as 'replacing' ACC…
…just when FUT is assigned after ACC:

Ngada kangka marun-i [ luuli-thuru-Ø] FUT-ACC
I tell boy-ACC dance-FUT-ACC
'I told the boy to dance'

Ngada kurri-thur karnjin-kur ACC-FUT
I see-FUT wallaby-FUT
'I want to see the wallaby'

ACC assigned before FUT Tense concord.
...so when does Tense concord take place?
The timing of Lardil concord
Lardil concord happens in the narrow syntax.
The timing of Lardil concord
Lardil concord happens in the narrow syntax.

   two arguments:
• sensitive to semantics of case
• bleeding relations with movement operations
The timing of Lardil concord
Lardil concord happens in the narrow syntax.
• sensitive to semantics of case

Ngada ne-thur yak-ur birnkil-uru-r
I hit-FUT fish-FUT fishing.spear-INSTR-FUT
'I will hit the fish with a fishing spear'

FUT replaces ACC but not INSTR

…more generally, doesn't replace meaningful cases.
→ semantics-morphology interface=syntax.
The timing of Lardil concord
Lardil concord happens in the narrow syntax.
  • sensitive to semantics of case

Ngada ne-\textbf{thur} yak-\textbf{ur} birnkil-uru-\textbf{r}
I hit-\textbf{FUT} fish-\textbf{FUT} fishing.spear-\textbf{INSTR-\textbf{FUT}}
'I will hit the fish with a fishing spear'

\textbf{FUT} replaces \textbf{ACC} but not \textbf{INSTR}

Anna pišet pis'mo ručkoi. [\textit{Russian}]
Anna writes letter.\textbf{ACC} pen.\textbf{INSTR}

Anna \textbf{ne} pišet pis'ma ručkoi.
Anna \textbf{not} writes letter.\textbf{GEN} pen.\textbf{INSTR}
The timing of Lardil concord
Lardil concord happens in the narrow syntax.
  • sensitive to semantics of case
  • bleeding relations with movements:
Ngawa be-thur bidngen-kur
dog bite-FUT woman-FUT
'The dog will bite the woman'
The timing of Lardil concord
Lardil concord happens in the narrow syntax.
  • sensitive to semantics of case
  • bleeding relations with movements:
Ngawabe-thur bidngen-kur
dog bite-FUT woman-FUT
'The dog will bite the woman'

Bidngen be-yi-thur.
woman bite-PASS-FUT
'The woman will be bitten'

Concord bled by passive
The timing of Lardil concord
Lardil concord happens in the narrow syntax.
  • sensitive to semantics of case
  • bleeding relations with movements:
Ngawa be-thur bidngen-kur
dog bite-FUT woman-FUT
'The dog will bite the woman'

Bidngen be-yi-thur.
woman bite-PASS-FUT
'The woman will be bitten'

Ngajurdangkar ngawa be-thur?
who.FUT dog bite-FUT
'Who will the dog bite?'

Concord bled by passive
…but not by wh-mvmt.
The timing of Lardil concord
Lardil concord happens in the narrow syntax.
- sensitive to semantics of case
- bleeding relations with movements:

\[
\begin{array}{c}
\text{CP} \\
\quad \text{C'} \\
\quad \quad \text{C} \\
\quad \quad \quad \text{TP} \\
\quad \quad \quad \quad \text{T'} \\
\quad \quad \quad \quad \quad \text{T} \\
\quad \quad \quad \quad \quad \quad \nu P
\end{array}
\]

- *passive* (bleeds concord)
- *wh-movement* (doesn't)
The timing of Lardil concord
Lardil concord happens in the narrow syntax.
- sensitive to semantics of case
- bleeding relations with movements:

```
CP
  \---- C'
    \---- C
      \---- TP
        \---- T'
          \---- T
            \---- vP
```

- passive (bleeds concord)
- wh-movement (doesn't)

syntactic cycle determines bleeding relations
The timing of Lardil concord
Lardil concord happens in the narrow syntax.
  • sensitive to semantics of case
  • bleeding relations with movements:

Bidngen  be-yi-thur
woman  bite-PASS-FUT
'The woman will be bitten'

Pis'ma  ne  bylo polučeno
letter.GEN not was received
'No letter was received'  [Russian]

  • passive bleeds Lardil Tense Concord,
    but not Russian Genitive of Negation…
The timing of Lardil concord
Lardil concord happens in the narrow syntax.
  • sensitive to semantics of case
  • bleeding relations with movements:

Bidngen  be-yi-thur
woman  bite-PASS-FUT
'The woman will be bitten'

Pis'ma  ne  bylo polučeno
letter.GEN  not  was  received
'No letter was received'  [Russian]

  • passive bleeds Lardil Tense Concord,
    but not Russian Genitive of Negation…
    …because Negation is lower than Tense.
An issue for today: Agree

- when does this happen?
An issue for today: Agree

- when does this happen?
sometimes, in narrow syntax
Zulu
(Bantu, South Africa)
Zulu Augments (Halpert 2011, in progress)

U-muntu a-ka-phek-anga i-qanda
AUG-1.person NEG-1S-cook-NEG.PAST AUG-5.egg
'A/the person didn't cook a/the egg'
Zulu Augments (Halpert 2011, in progress)

U-muntu a-ka-phek-anga qanda
AUG-1.person NEG-1S-cook-NEG.PAST 5.egg
'A/the person didn't cook any egg'

augmentless nominals must be:
• c-commanded by negation (NPIs)
• in certain structural positions…
Zulu Augments (Halpert 2011, in progress)

U-muntu a-ka-phek-anga qanda
AUG-1.person NEG-1S-cook-NEG.PAST 5.egg
'A/the person didn't cook any egg'

A-ku-phek-anga muntu i-qanda
NEG-17S-cook-NEG.PAST 1.person AUG-5.egg
'NOBODY cooked a/the/any egg'
**Zulu Augments** (Halpert 2011, in progress)

**U-muntu** a-ka-phek-anga **qanda**
AUG-1.person NEG-1S-cook-NEG.PAST 5.egg
'A/the person didn't cook any egg'

A-ku-phek-anga **muntu** i-qanda
NEG-17S-cook-NEG.PAST 1.person AUG-5.egg
'NOBODY cooked a/the/any egg'

*A-ku-phek-anga (u)-muntu *qanda*
NEG-17S-cook-NEG.PAST (AUG)-1.person 5.egg

→ must be highest nominal in vP
Zulu Augments (Halpert 2011, in progress)

- augmentless nominal must be highest in \( vP \)

...but cannot then be moved out of this position:

\[
\text{ngeke ku-fundise } \text{muntu} \\
\text{never } 17\text{S-teach.SJC} \text{1.person} \\
'\text{Nobody will ever teach}'
\]

\[
*\text{ngeke } \text{muntu } \text{a-fundise} \\
\text{never } \text{1.person} \text{1S-teach.SJC}
\]
Zulu Augments (Halpert 2011, in progress)
• augmentless nominal must be highest in vP
...but cannot then be moved out of this position:
…and movement makes
  previously inaccessible nominals available:

U-muntu a-ka-phek-anga qanda
AUG-1.person NEG-1S-cook-NEG.PAST 5.egg
'A/the person didn't cook any egg'

*A-ku-phek-anga (u)-muntu qanda
NEG-17S-cook-NEG.PAST (AUG)-1.person 5.egg
Zulu Augments (Halpert 2011, in progress)
• augmentless nominal must be highest in vP
...but cannot then be moved out of this position:
…and movement makes
   previously inaccessible nominals available:
→ must be highest in vP after movement has taken place.
   (and see Holmberg and Hróarsdóttir 2004,
    Asarina 2011 on Icelandic)
An issue for today: Agree

- when does this happen?
  sometimes, in narrow syntax
  sometimes, after narrow-syntactic movement
Kaqchikel
(Mayan, Guatemala)
Kaqchikel Agent Focus (Preminger 2011)

ja  rat  x-at-axa-n     ri  achin
FOC  you  PRFV-2SG-hear-AF  the man
'It was you that heard the man'

ja  ri  achin  x-at-axa-n     rat
FOC the man  PRFV-2SG-hear-AF  you
'It was the man that heard you'
Kaqchikel Agent Focus (Preminger 2011)

ja  rat x-at-axa-n  ri  achin
FOC  you  PRFV-2SG-hear-AF  the  man
'It was you that heard the man'

ja  yïn x-in-axa-n  ri  achin
FOC  me  PRFV-1SG-hear-AF  the  man
'It was me that heard the man'

ja  ri  achin x-in-axa-n  yïn
FOC  the  man  PRFV-1SG-hear-AF  me
'It was the man that heard me'
Kaqchikel Agent Focus (Preminger 2011)

ja  **rat**  x-at-axa-n  **ri**  achin  
FOC  **you**  PRFV-**2SG**-hear-AF  the man  
'It was you that heard the man'

ja  **yïn**  x-in-axa-n  **ri**  achin  
FOC  **me**  PRFV-**1SG**-hear-AF  the man  
'It was me that heard the man'

*ja  **rat**  x-in/at/Ø-axa-n  **yïn**  
FOC  **you**  PRFV-**1SG/2SG/3SG**-hear-AF  **me**  
'It was you that heard me'
Kaqchikel Agent Focus (Preminger 2011)

ja  rat  x-at-axa-n  ri  achin
FOC  you  PRFV-2SG-hear-AF  the man
'It was you that heard the man'

*ja  rat  x-in/at/Ø-axa-n  yïn
FOC  you  PRFV-1SG/2SG/3SG-hear-AF  me
'It was you that heard me'

→ there is a Probe that seeks to Agree with a Person feature (and all Person features must be Agreed with)
Kaqchikel Agent Focus (Preminger 2011)

• there is a Probe that seeks to Agree with a Person feature (and all Person features must be Agreed with)

problem:

ja ri xoq x-Ø-tz'et-ö ri achin
FOC the woman PRFV-3SG-see-AF the man
'It was the woman who saw the man'
Kaqchikel Agent Focus (Preminger 2011)

• there is a Probe that seeks to Agree with a Person feature (and all Person features must be Agreed with)

problem:

ja ri xoq x-Ø-tz'et-ö ri achin
FOC the woman PRFV-3SG-see-AF the man
'It was the woman who saw the man'

Preminger's conclusion:
you can't always get what you want.
An issue for today: Agree

- when does this happen?
  sometimes, in narrow syntax
sometimes, after narrow-syntactic movement

- what would go wrong if it failed?
  Nothing.

\[
TP \\
\downarrow \\
T \\
\downarrow \\
\text{DP} \\
\downarrow \\
v' \\
\downarrow \\
v \\
\uparrow \\
\text{VP}
\]