Syntactic Agreement

Roberta D’Alessandro
EGG in Lagodekhi
Syntactic vs Morphological agr.

- Syntactic vs morphological agreement
- Do we need morphology to know that Agree has taken place?

(1) Jij loop\text{t}
    you walk-2.sg
    ‘You walk’

(2) You walk

Is there agreement in English? How do we know?
Syntactic vs Morphological agr.

Maori

• No morphological marking for Case
• The most prominent DP does NOT receive any preposition marking
• All other DPs do

Transitive clause

(1) E here ana a Huia i ngā kurī
    T tie PROG PERS Huia OBJ the-PL dog

‘Huia (Nom) was tying up the dogs’

(from Bauer 1997:477 in Chung 2013:255)
Syntactic vs Morphological agr.

Transitive active clause

(1)E here ana a Huia i ngā kurī
T tie PROG PERS Huia OBJ the-PL dog

‘Huia (NOM) was tying up the dogs’

(from Bauer 1997:477 in Chung 2013:255)

Passive clause

(2)E here-a ana ngā kurī e Huia
T tie-PASS PROG the-PL dog by Huia

‘The dogs (NOM) were being tied up by Huia’

(from Bauer 1997:477 in Chung 2013:255)
Negation in Maori

Negation is a raising structure: only the DP subject can raise

(3)a. E kore a ia e hoki mai
   T not PERS she T return t-.here
i a Ponga
from PERS Ponga
‘She (NOM) will never return from Ponga’
   (from Bauer 1997:459 in Chung 2013:256)

b. Kaua tētahi wakatūranga e hanga-ia ki runga
a construction T build-PASS to top
i te whenua
OBJ the land
‘No construction (NOM) shall be built on the land’
   (from Ngata 1994:68 in Chung 2013:256)
Agreement at PF

- Agreement is necessarily post-syntactic (Bobaljik 2008)
- It happens in the morphological subcomponent
- It accesses the output of operations that are invariably defined as postsyntactic, like morphological case assignment
- Only morphological (m-) case is accessed by agreement

Recall: Ergativity

[Diagram showing ergative alignment and accusative alignment]
Agreement at PF

- Hierarchy of grammatical functions as agreement controllers (Moravcsik 1974)

- Subject > Object > Indirect Object > Adverb

- Implicational hierarchy

Rewritten as:
Nominative > accusative > dative

Problem: ergativity
Agreement at PF

• Generalizations:
  a. no agreement (Dyirbal, Lezgian)
  b. ABS only (Tsez, Hindi)
  c. ABS ERG (Eskimo-Inuit, Mayan)
  d. ABS ERG DAT (Basque, Abkhaz)
  e. * ERG only
  f. * ERG DAT, no ABS
  g. * DAT only
  h. (*ABS DAT, w/o ERG)

Absolutive > Ergative > Dative
Agreement at PF

- Absolutive > Ergative > Dative (for ergative languages)
- Nominative > Accusative > Dative (for nom/acc languages)

- Unmarked case > Dependent Case > Lexical/Oblique case

- In a DOC: dative is lexical
- two DPs compete for Case: one is assigned the DEPENDENT Case (acc), the other one the unmarked Case
Agreement at PF

- Hindi/Urdu: the agreement controller is the highest caseless (unmarked) DP
- Ergative markers appear on the external argument of transitives **ONLY in the perfective**
- Dative marks the experiencer
- The remaining arguments are caseless
Hindi/Urdu agreement

(8) Perfective:

- a. SUBJ-ne OBJ-Ø V
- b. SUBJ-ne OBJ-ko V default

Imperf.:

- c. SUBJ-Ø OBJ-Ø V
- d. SUBJ-Ø OBJ-ko V

Psych:

- e. SUBJ-ko OBJ-Ø V

(9) Raam-ne RoTii khaayii thii
Ram-ERG (M) bread-Ø(FEM) eat.PERF.FEM be.PAST.FEM
‘Ram had eaten bread.’
Hindi/Urdu agreement

• In the imperfective, no argument is marked for Case
• Agreement takes place with the highest m-case element (according to Moravcsik’s hierarchy)

(10) siitaa kelaa khaatii thii
   Sita-Ø (F) banana-Ø (M) eat.IMPERF.FEM be.PAST.FEM
   ‘Sita (habitually) ate bananas.’

Compare with (9):

(9) Raam-ne RoTii khaayii thii
   Ram-ERG (M) bread-Ø(FEM) eat.PERF.FEM be.PAST.FEM
   ‘Ram had eaten bread.’
Nepali quirky subjects

(11) malāī timī man par-ch-au. (*parch-u)  
    1SG.DAT 2MH.NOM liking occur-NPT-2MH(occur-NPT-1SG)  
‘I like you.’

(Bickel & Yādava 2000:348 in Bobaljik 2008:311)

• The nominative object, not the dative subject, controls agreement

• It is the morphological case, not the grammatical function, that determined agreement
Agreement within PF domains


(12) **Recoverability**

Rules of suppression operate under agreement

(A&N 2003:688)

(if you wish to delete or impoverish morphologically a terminal node (say, an agreement ending) this node must be in an agreement relation with something else, from which you can recover its full value.)

Recoverability can happen only within a prosodic phrase $\Phi$
Agreement within PF domains

(13)  jij  loopt
      you  walk-2.sg
‘you  walk’

In inversion structures or adverb-initial V2

(14)  [CP Dagelijks [C, loop [ jij tAdv met een hondje
daily  walk-2.sg  you-2.sg  with a dog
over straat
tV]on street
‘You walk daily on the street with a dog’
Prosodic domains

(14) \[c_{CP} \text{Dagelijks} [c', \text{loop} [jij t_{Adv} \text{met een hondje}]
\]
\[
\quad \text{daily} \quad \text{walk-2.SG} \quad \text{you-2.SG} \quad \text{with a dog}
\]
\[
\text{over straat}
\]
\[
t_v \text{on street}
\]
‘You walk daily on the street with a dog’

Prosodic phrasing for (14):

(15) \{\text{Dagelijks} \{\text{loop jij}\} \{\text{met een hondje}\} \{\text{over straat}\}
\]
\[
\quad \text{daily} \quad \text{walk-2.SG} \quad \text{you-2.SG} \quad \text{with a dog} \quad \text{on street}
\]
Agreement at NS /the PIC

Phases are characterized by a Phase Impenetrability Condition, which is defined as follows:

- In a phase $\alpha$ with head $H$, the domain of $H$ is not accessible to operations outside $\alpha$; only $H$ and its edge are accessible to such operations.

(Chomsky 2000:108)
Agreement and the PIC

• Insensitivity

(16) ənan qəlyiνu ləŋərkə-nin-et [Chukchee]
he regrets-3.PL

[iŋqun Ø-rətəṃŋəν-nen-at qora-t]
that 3SG-lost-3-3PL reindeer-PL
‘He regrets that he lost the reindeers’ (Bošković 2007:613)
PIC insensitivity

Existentials

(17) [IP There I [VP seem to have [VP appeared two problems]]], (don’t there)? (Bošković 2007: 615)

Wh- in situ

(18) John-ga Peter-ga nani-o kat-ta
    John-NOM Peter-NOM what-ACC buy-PAST
    to omotteiru no?
    COMP think Q

‘What does John think that Peter bought?’ (Bošković 2007: 616)
(19) weil die Traktoren zu reparieren versucht wurden
    since the tractors to repair were tried
‘since they tried to repair the tractors’
    (Bobalijk & Wurmbrand 2005: 815)
PIC sensitivity

- PIC = prosodic domains

*Recall* Kayne’s generalization re: movement and agreement

(23) a. Le ragazze sono arrivate. [Italian]
    the girls-fem.pl are arrived-fem pl
    ‘The girls have arrived.’

b. Le ragazze sono state arrestate.
    the girls-fem pl are been-fem.pl arrested-fem.pl
    ‘The girls have been arrested.’

c. Si sono viste le ragazze.
    SI are seen-fempl the-fem.pl girls-fem.pl
    ‘We have seen the girls/the girls have been seen.’
PIC sensitivity

(24) Le ragazze si sono guardate
the girls selves are looked-F.PL

allo specchio
at-the mirror
‘The girls have looked at themselves in the mirror.’

(25) Le abbiamo salutate.
them-fem pl we-have greeted-fem pl
‘We have greeted them.’
PIC sensitivity

(26)  a.*Abbiamo salutate le ragazze.
      have-1.PL greeted-F.PL the-fpl girls-F.PL

      b. * Le abbiamo salutato

      Kayne: movement triggers agreement
Wrong prediction! The pp should agree with the *in situ* object.
Pp agreement in Italian

CONDITION ON THE MORPHOPHONOLOGICAL REALIZATION OF AGREEMENT

• A. Given an Agree relation A between Probe P and Goal G, morphophonological agreement between P and G is realised iff P and G are contained in the complement of the minimal phase-head H.

• B. XP is the complement of a minimal phase head H iff there is no distinct phase head H’ contained in XP whose complement YP contains P and G.

(D’Alessandro & Roberts 2008:482)
Pp agreement in Italian

(35)

\[
\begin{align*}
CP & \quad \rightarrow \quad C \\
TP & \quad \rightarrow \quad E_\mathbf{A} \quad T \\
cl-T & \quad \rightarrow \quad vP \\
\text{phase head} & \\
\text{phase head} & \\
\text{Spell-Out domain} & \\

PF & \quad \rightarrow \quad E_\mathbf{A} \quad cl \quad T \quad v \quad (pp) \\
\end{align*}
\]
Pp agreement in Italian

Ho mangiato la mela.
‘I have eaten the apple.’

(38)
Pp agreement in Italian

(39) Sono arrivate le ragazze.
    are arrived-fem pl the girls-fem pl
    ‘The girls have arrived.’

The derivation for (39) is as follows:

(40)

```
CP
   PP
      T
         Aux[uN, uP] vP
            arrivat- [uN,uG] VP
                arrivat- [uN,uG] le ragazze[f,pl]

PF
   Aux[uN, uP] arrivat- [uN,uG] le ragazze[f,pl]
      sono
         -e
```
PIC domains $\neq$ prosodic d.

(25)  

a. (bá-niké ú-Síphó íí-maali) [Zulu]  
2SUBJ-give CL1-Spho CL9-money  
‘They gave Sipho money.’

b. (ín-kósíkaazi) (í-théngel’ ábá-fán’ ízím-baatho)  
CL9-woman 9SUBJ-buy.for CL2-boy CL10-clothes  
‘The woman is buying clothes for the boys.’

c. (ú-Síph’ ú-phékél’ ú-Thánd’ in-kúukhu)  
CL1-Spho 1SUBJ-cooked.for CL1-Thandi CL9-chicken  
‘Sipho cooked chicken for Thandi.’

d. (bá-nik’ ú-Síph’ í-bhayisékiili (namhláanje)  
2SUBJ-gave CL1-Spho CL5-bicycle today  
‘They gave Sipho a bicycle today.’

(Cheng & Downing 2012: 7)
Zulu

(26) $[_{CP} \ [_{TP} \ \textbf{subject verb} \ [_{VP} \ [_{VP} \ \textbf{IO DO}]]]]$

Tone spreading is insensitive to the upper boundary
Modular PIC

• We need to take PF more seriously.

Eastern Abruzzese

8. a. So vistə 
   am seen
   ‘I have seen’.act

b. So vvistə 
   am seen
   ‘I am seen’. Pass

9. a. Si rəspəttətə 
   are respected
   ‘you have respected’

b. Si rrəspəttətə 
   are respected
   ‘you are respected’

(Biberauer & D’Alessandro 2006, D’Alessandro & Scheer 2015)
Phonological rules

- Phonological rules need a DOMAIN of application
- We know that the domain of application of phonological rules is NOT a syntactic phrase: NON ISOMORPHISM (Selkirk 1981, Nespor & Vogel 1986)
- No correspondence, two different «modules»

- A phonological RULE expressing syntactic information is very rare
- **Who cares**
Rafforzamento fonosintattico

• *Rafforzamento fonosintattico* (phono-syntactic doubling, RF) is a SANDHI rule applying to the initial consonant of Word 2 in a sequence W1 W2 if given conditions are met

\[
\begin{align*}
W1 & \quad W2 \\
1. \quad \text{CVCV} & \quad \text{CVCV} \quad \rightarrow \quad \text{CVCV} \quad \text{CCVCCV}
\end{align*}
\]

stress \hspace{3cm} \text{gemination}
## Auxiliary selection in EA

10.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Verb Phrase</th>
<th>English Meaning</th>
<th>Auxiliary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sò vistə</td>
<td>(I) am seen</td>
<td>‘I have seen’</td>
<td>BE</td>
</tr>
<tr>
<td>Si vistə</td>
<td>(you) are seen</td>
<td>‘you have seen’</td>
<td>BE</td>
</tr>
<tr>
<td>A vistə</td>
<td>(he) has seen</td>
<td>‘s/he has seen’</td>
<td>HAVE</td>
</tr>
<tr>
<td>semə vistə</td>
<td>(we) are seen</td>
<td>‘we have seen’</td>
<td>BE</td>
</tr>
<tr>
<td>setə vistə</td>
<td>(you.pl) are seen</td>
<td>‘you have seen’</td>
<td>BE</td>
</tr>
<tr>
<td>a vistə</td>
<td>(they) have seen</td>
<td>‘they have seen’</td>
<td>HAVE</td>
</tr>
</tbody>
</table>

D’Alessandro & Roberts (2010)
Voice

Eastern Abruzzese

11.a. So vîstə
    am seen
    ‘I have seen’.act

11.b. So ǥvîstə
    am seen
    ‘I am seen’. Pass

12.a. Si rəspəttatə
    are respected
    ‘you have respected’

12.b. Si ɾɾəspəttatə
    are respected
    ‘you are respected’
Voice

• 2 different auxiliaries?
  > Unlikely

13. So/ si > so/si ssəmbətəchə (I am/you are nice)

Compare:
14. nu waglioniə səmbətəchə
   a  guy       nice
   'A nice guy'

The phonological rule applies when it can
Voice

- Structural difference between active and passive
Unaccusatives

• Observe the following

a. So m\textit{m}orte (predicative)

b. Me so m\textit{orte} (unaccusative/inchoative)

c. So \textit{rəmaste} \[\text{Arielli}\]
   am.1.sg stayed.sg
   ‘I have stayed’
Voice

(1) A rəmastə [Arielli]
has.3.sg stayed.sg
‘(S)he has stayed’

(2) Jè vvistə
is.3.sg seen
‘(S)he is seen’

Voice is the relevant feature, not transitivity
Syntax – Phonology mismatch
Modular PIC

- We can also have a PIC at PF (D’Alessandro & Scheer 2015)

(3) Modular PIC: languages choose which access points are endowed with a PIC

**language A:**

- phase heads $\alpha$ and $\delta$ have a PIC at PF
- phase heads $\beta$ and $\gamma$ do not

![Diagram A: PF with $\delta$, $\gamma$, $\beta$, and $\alpha$. $\delta$ has a PIC at PF. $\gamma$ and $\beta$ do not.]

**language B:**

- phase heads $\alpha$ and $\gamma$ have a PIC at PF
- phase heads $\beta$ and $\delta$ do not

![Diagram B: PF with $\delta$, $\gamma$, $\beta$, and $\alpha$. $\delta$ and $\gamma$ have PICs at PF. $\beta$ and $\delta$ do not.]
References


