# The Locus of Variation in Ā-Sensitive Agreement

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#### Overview

 $\bar{A}$ -sensitive  $\phi$ -agreement effects have an underlying uniform syntax. Variation in these morphological, arising from operations and principles independently needed in morphology.

## Ā-sensitive φ-agreement effects

An instance of  $\phi$ -agreement X exhibits an  $\bar{\textbf{A}}$ -sensitivity effect if

- i. X takes the form  $\alpha$  for a particular set of  $\phi$ -features  $\phi_1$  on nominal N when N does not have an  $\bar{A}$ -feature and
- ii. X takes the form  $\beta$  for  $\phi_1$  on N when N does have an  $\bar{A}$ -feature, where  $\alpha \neq \beta$ .
- Some examples of effects meeting the above definition:
- (1) Fiorentino (Romance, Italy)

```
le ragazze che { gli / *le }
the girls C { 3sg.m/*3pl.f }
{ ha / *hanno } parlato con te
{ have.3sg/*have.3pl } spoken with you
```

'the girls who have spoken to you?'
(Brandi and Cordin 1989:124–125)

(2) Abkhaz (West Caucasian, Russia)

wəy a-xac'a də- $\{\mathbf{z}_j/^*\mathbf{I}_j\}$ -bàz that def-boy 3sg.an.abs- $\{\mathbf{wh.erg}/^*3sg.f.erg\}$ -saw  $\mathbf{a-jyab}_j$  def-girl

'the girl who saw that boy' (Hewitt 1979:61)

(3) Kabyle (Berber, Algeria)

taqcict-nni i {i-wala-n /\*t-wala }
woman-dem С {3sg.м-see-pтср/3sg.f-see }
Mohand
Mohand

'the girl who saw Mohand'

- The exact morphological manifestation varies
- Fiorentino: Default agreement and default subject clitic (3sg/3sg.м)
- > **Abkhaz:** Specialized ergative agreement (*z*-)
- ? Why does implication in an Ā-dependency affect the form of agreement referencing a DP?
- ? What does variation in the morphology that languages employ in the  $\bar{A}$ -context tell us about the principles underlying  $\bar{A}$ -sensitive  $\phi$ -agreement?

## Total vs. partial φ-impoverishment

 $\wp$  Languages differ as to how many  $\varphi$ -feature contrasts are neutralized in the presence of  $\bar{A}$ -features.

- Compare the Kabyle in (9) with Tashlhit in (10).
  - (9) Kabyle (Berber, Algeria)

    tiqcicin-nni i { i-ruḥ-n / \*ruḥ-nt }

    girls-DEM С { 3sg.м-go-ртср / go-3pl.f }

    'the girls who left'
- irgazn<sub>i</sub> nna ffegh-n-\*(in)  $_{-i}$  man.pl  $C_{REL}$  left-pfv-ptcp-\*(pl) 'the men who left.' (Ouhalla 2005 citing Chafiq 1990:123)

Tashlhit (Berber, Morroco)

- Kabyle: all φ-feature contrasts neutralized
- The difference between total/partial neutralization rests in the impoverishment rules active in a given language.
- ightharpoonup Total neutralization  $\rightarrow$  total φ-impoverishment in the context of [Ā]
  - (11) Kabyle partial  $\varphi$ -impoverishment  $[\varphi] \rightarrow \emptyset / [\_, \bar{A}, Agr]$
- $\triangleright$  **Partial neutralization**  $\rightarrow$  partial φ-impoverishment in the context of [Ā]
  - (12) Tashlhit partial  $\varphi$ -impoverishment [PERSON, GENDER]  $\rightarrow \emptyset$  / [\_\_,  $\bar{A}$ , Agr]

### A-exponence

- Languages differ as to whether there is there specialized morphology in the Ā-context
- Some languages, like **Fiorentino** in (1), have no special morphology in the context of Ā-features
- Default agreement, partial agreement, or lack of agreement result

Use of forms already present in the paradigm

- Other languages, like Abkhaz in (2) and Kabyle/Tashlhit in (3)/(9)–(10), have specific morphology that appears only in the Ā-context
- I treat such morphology as the **realization of the A**-features remaining after impoverishment has deleted  $\phi$ -features.
- **Example 1:** The Kabyle/Tashlhit 'participle' suffix is the spell out of an Ā-feature on a head with [Agr]:
- (13) Kabyle/Tashlhit  $\bar{A}$ -exponence -n  $\leftrightarrow$  [ $\bar{A}$ ] / [\_\_, Agr]
- **Example 2:** The ergative wh-agreement prefix z- in Abkhaz is the spell out of an  $\bar{A}$ -feature on v:
- (14) Abkhaz  $\bar{A}$ -exponence  $z \rightarrow [\bar{A}, Agr, v]$

# Lack of impoverishment?

- **A Prediction:** There should be languages that exhibit Ā-exponence while lacking φ-impoverishment.
- Kobiana (Atlantic, Guinea-Bissau) → verbs agree with their subjects for person/number. Subject focus triggers a second set of subject agreement prefixes.
- (15) Kobiana φ-agreement

  SG PL
- (16) Kobiana Ā-agreement

  SG PL

  1 mé- ngéena2 ée- káana3 áma- náàná-
- There are two crucial observations:
- ① Subject focus in (16) **retains all φ-feature contrasts** present in (15).
- Subject focus morphemes are not transparently segmentable.
- **Analysis:** Kobiana has no φ-impoverishment in the context of Ā-features, but it does exhibit Ā-exponence
- Kobiana has two distinct sets of φ-agreement VIs, (17).
- (17) Kobiana agreement VIs
  - a.  $m\acute{a}$ -,  $\acute{a}$ -,  $\grave{a}$ -, ...  $\leftrightarrow$   $[\phi, Agr]$
  - b. mée-, ée-, áma-, ...  $\leftrightarrow$  [ $\varphi$ ,  $\bar{A}$ , Agr]
- Such a system is expected under the theory discussed here.

### The Proposal

Ā-sensitive agreement have a unified underlying source

IN CONTROL OF THE PROPERTY OF

Syntax

φ-probes copy [ $\phi$ ] and [ $\bar{A}$ ] from their goals

(via Interaction/Satisfaction model of Agree, Deal 2015)

Morphology

After agree with an  $\bar{A}$ -marked DP in (4), H has both  $[\phi]$  and  $[\bar{A}]$ . Also includes a feature [Agr].

- (5) Features on H in morphology
  - a. DP w/o  $[\bar{A}] \Rightarrow [H, \phi]$ , Agr]
  - b. DP w/  $[\bar{A}] \Rightarrow [H, \phi, \bar{A}, Agr]$
- Ā-triggered impoverishment (Baier 2018)

 $\bar{A}$ -features may trigger impoverishment of  $\phi$ -features on the same probe, (6).

(6) 
$$[\varphi] \rightarrow \emptyset / [\_, \bar{A}, Agr]$$

#### Vocabulary Insertion

Impoverishment leads to the realization of an unexpected underspecified exponent.

(7) a. 
$$x \leftrightarrow [\phi, Agr, H] \Leftarrow no insertion$$
  
b.  $y \leftrightarrow [\bar{A}, Agr, H] \Leftarrow specialized \bar{A}$ -agreement

← default agreement

## Morphological variation

c.  $z \leftrightarrow elsewhere$ 

- **Variation** arises from how a given language's morphology manipulates and realizes feature bundles of the type in (5b)
- Two dimensions of variation
- $\triangleright$  How many φ-feature contrasts are expressed in the  $\bar{A}$ -context? (variation at step  $\bar{B}$ )
- $\triangleright$  Is there specialized morphology that occurs only in the  $\bar{A}$ -context (variation at step  $\boxed{4}$ )
- These dimensions are **independent of one another**, as shown in table (8).
  - (8) Typology of Ā-exponence and impoverishments

		φ-impoverishment		
		TOTAL	PARTIAL	NONE
Ā-exponence	YES NO	Abaza Fiorentino	Tashlhit Lubukusu	Kobiana Spanish