A Morphological Theory of Anti-Agreement

Nico Baier (nbbaier@berkeley.edu)

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Berkeley — UNIVERSITY OF CALIFORNIA

Anti-agreement

- **Anti-agreement (AA)**
  φ-agreement with an argument is disrupted when that argument is Ā-extracted (Ouhalla 1993).

  (1) **Berber anti-agreement**
  man tamghart$_i$ ay **yzrin**/*t$_i$-zra ___$_i$ Mohand
  which woman C see.**PART**/3SG.F-see Mohand
  'Which woman saw Mohand?' (Ouhalla 1993:479)

- **Traditional view**
  AA is a lack of agreement that results from syntactic constraints on extraction (Diercks 2010; Erlewine 2016; Richards 1997; Schneider-Zioga 2007).

- **Core idea**
  AA is a form of **wh-agreement** – dedicated agreement morphology that indexes extracted arguments (Chung and Georgopoulos 1988).

Proposal

- AA is the result of a **φ-probe copying both [φ] and [WH] from a goal**.

  (2) [... H$_{[uφ]}$ [... DP$_{[φ, wh]}$ ...]
  └─── φ+WH ───┘

- **Impoverishment** applies to the [φ+WH] bundle in the morphology.

  (3) [φ] → Ø / [___, WH]

- Insertion of a more highly specified agreement exponent is blocked.

- **Ā-sensitive Agreement**
  'Anti-agreement' and 'wh-agreement' same underlying phenomenon.

  ▷ **Anti-agreement** → default agreement or zero form occurs.
  ▷ **Wh-agreement** → form realizing [WH] occurs.

Data: *Wh*-agreement in Abaza (NW Caucasian)

- Verbs exhibit multi-argument agreement, ergative-absolutive alignment.

  (4) *pro$_i$* *pro$_k$* ʃʷə$_k$-l$_i$-bat'
  3SG.F 2PL 2PL-3SG.F-see
  'She saw you(PL)' (O'Herin 2002:66)

- *Wh*-words and relative operators (not pictured) **control dedicated forms of agreement**.

  (5) **Absolutive *wh*-agreement: y(ə)-**
  Izmir *pro* dzač'ʷəya$_i$ yə$_i$-r-bakʷaz
  Izmir 3PL who ABS.WH-3PL-see.PL.PST
  'Who did they see in Izmir?' (O'Herin 2002:252)

  (6) **Ergative *wh*-agreement: z(ə)-**
  afač^{j}əʕʷ dəzda$_i$ y-na-z$_i$-axʷ
  sugar who 3SG.I-PFV-ERG.WH-take
  'Who took the sugar?' (O'Herin 2002:252)

- Prefixes y(ə)- and z(ə)- occupy same 'slot' as other agreement morphemes.

Analysis: Abaza

- **O'Herin 2002:** Both y(ə)- and z(ə)- spell out [WH]

- **Observation:** wh-agreement prefixes differ in a crucial way.
  ▷ y(ə)- is a morphological default → **'anti-agreement'**
  ▷ z(ə)- spells out [WH] → '*wh*-agreement'

(7) **Absolutive agreement**

	1	2F	2M	3F	3M	3I	WH
SG	s-	b-	w-	d-	d-		y-	y-
PL	h-	ʃʷ-	ʃʷ-	y-	y-	y-	y-

(8) **Ergative agreement**

	1	2F	2M	3F	3M	3I	WH
SG	s-	b-	w-	l-		a-	z-
PL	h-	ʃʷ-	ʃʷ-	r-	r-	r-	z-

- **Step 1, Syntax:** φ-probe on Agr copies back [φ] and [WH]

  (9) [... Agr$_{[uφ]}$ [... DP$_{[φ, wh]}$ ...]
  └── φ+WH ──┘

- **Step 2, Morphology:** Impoverishment deletes [φ] from [φ+WH] bundle.

  (10) [φ] → Ø / [Agr, ___, WH]

- **Step 3, Morphology:** Vocabulary Insertion (VI)

  (11) a. ✗ **Full agreement:** [Agr, φ:val] ↔ /s-/, /b-/, ... ineligible
  b. ✓ **Wh-agreement:** [Agr, WH] ↔ /z-/ eligible
  c. ✓ **Default:** [Agr] ↔ /y-/ eligible

Extension to Anti-Agreement: Berber

- Subject extraction requires that the verb be in the **'participle' form (anti-agreement)**. Full person/gender/number agreement is impossible.

  (12) **Subject extraction: participle form (AA)**
  man tamghart$_i$ ay **yzrin**/*t$_i$-zra ___$_i$ Mohand
  which woman C see.**PART**/3SG.F-see Mohand
  'Which woman saw Mohand?' (Ouhalla 1993:479)

- Non-subject extraction does not trigger anti-agreement.

  (13) **Object extraction: full agreement (no AA)**
  ma$_i$ ag **i$_k$**-swa **ʕli$_k$** ___$_i$
  what C **3SG.M**-drink **Ali**
  'What did Ali drink?' (Ouali 2011:99)

- The participle is composed of a prefix **i-** and suffix **-n**.
  ▷ i- → default agreement (3SG.MASC, cf. (13)).
  ▷ -n → only occurs in participles and only in certain aspects.

- **Analysis:** The same impoverishment rule applies in Berber and Abaza.

  (14) [φ] → Ø / [Agr, ___, WH]

  ▷ Lack of φ-features gives rise to default agreement, i-, in Berber.
  ▷ The suffix -n is the spell out of [WH] in the context of certain Asp⁰.

- **Upshot:** In both Abaza and Berber, there is **full agreement in the syntax, obscured by impoverishment in the morphology.**

Technical Assumptions

- **Ā-syntax**: Ā-moved XPs bear [WH].
- **Agreement**: φ-probes ([uφ]) copy back both [φ] and [WH] from a goal.
- **Distributed Morphology**: late insertion; underspecification.

Extraction Asymmetries

- Data like the Berber subject/object asymmetry has led anti-agreement to be classified as a syntactic extraction asymmetry.
  ▷ Assumed to be triggered by a subset of arguments.

- However, cross-linguistically, **there is no such asymmetry**. Crucial data comes from languages in which multiple arguments are cross-referenced.

(15) **Variation in Ā-sensitive agreement triggers**

Agreement	Trigger(s)	Language
Nom + Acc	Nom	Palauan (Georgopoulos 1991)
Nom + Acc	Nom + Acc	Zulu (Doke 1927)
Nom + Acc	Acc	Ndebele (A. Pietraszko, p.c.)
Erg + Abs	Erg	Kaqchikel (Erlewine 2016)
Erg + Abs	Erg + Abs	Abaza (O'Herin 2002)
Erg + Abs	Abs	Selayarese (Finer 1997)

- Given the configuration in (2), there is a crucial precondition on the possibility of a φ-probe exhibiting Ā-sensitive agreement.

  (16) **Precondition on Ā-sensitive agreement**
  Extraction of an argument α can trigger Ā-sensitive agreement on a φ-probe β iff β has Agreed with α.

- Berber object extraction doesn't trigger AA because the object never Agrees with the relevant φ-probe.

  (17) **Subject extraction: probe finds [φ, WH]**
  [... H$_{[uφ]}$ [... [$_{vP}$ DP$_{[φ, wh]}$ v [$_{VP}$ V DP$_{[φ]}$]]]]
  └── φ+WH ──┘

  (18) **Object extraction: probe finds [φ]**
  [... H$_{[uφ]}$ [... [$_{vP}$ DP$_{[φ]}$ v [$_{VP}$ V DP$_{[φ,WH]}$]]]]
  └── φ ──┘

- **Variation in the distribution of triggers reduces to:**
  ▷ Location and number of φ-probes in a clause.
  ▷ The φ-probes that φ-impoverishment applies to.

Selected References

Chung, Sandra, and Carol Georgopoulos. 1988. Agreement with gaps in Chamorro and Palauan. In *Agreement in Natural Languages: Approaches, Theories, and Descriptions*, ed. Michael Barlow and Charles A. Ferguson, 251–67. Cent. Study Lang. Inf.
Diercks, Michael. 2010. Agreement with Subjects in Lubukusu. Doctoral Dissertation, Georgetown University.
Doke, Clement M. 1927. *Textbook of Zulu grammar*. The University of the Witwatersrand Press.
Erlewine, Michael Y. 2016. Anti-locality and optimality in Kaqchikel Agent Focus. *Natural Language and Linguistic Theory* 34:429–479.
Finer, Daniel L. 1997. Contrasting A'-Dependencies in Selayarese. *Natural Language and Linguistic Theory* 15:677–728.
Georgopoulos, Carol. 1991. *Syntactic variables: Resumptive pronouns and a' binding in palauan*. Springer.
O'Herin, Brian. 2002. *Case and Agreement in Abaza*. SIL International.
Ouali, Hamid. 2011. *Agreement, Pronominal Clitics and Negation in Tamazight Berber*. Bloomsbury Academic.
Ouhalla, Jamal. 1993. Subject-extraction, negation and the anti-agreement effect. *Natural Language and Linguistic Theory* 11:477–518.
Richards, Norvin. 1997. What moves where when in which language? Doctoral Dissertation, Massachusetts Institute of Technology.
Schneider-Zioga, Patricia. 2007. Anti-agreement, anti-locality and minimality. *Natural Language and Linguistic Theory* 25:403–446.