

# Ergative gender agreement in Dargwa

## “Backward Control” or feature sharing?

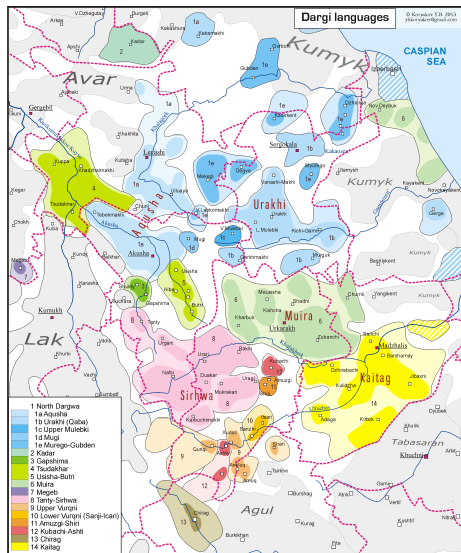
Oleg Belyaev

Lomonosov Moscow State University

HeadLex16, July 26, 2016

# Dargwa: General information

- A group of East Caucasian languages
- SOV, ergative alignment
- Complex verb and noun morphology
- Person and gender agreement



# Agreement in Dargwa

## Gender

	SG	PL
M	<i>w</i>	<i>b</i>
F	<i>j</i>	
N	<i>b</i>	<i>d</i>

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 P.            F-went.out  
 'Patimat went out.'

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  - ▶ pat'imat j-id.až.i  
P. F-went.out  
'**Patimat** went out.'
  - ▶ murad-li wac'a.ci-j pat'imat j-us.aj  
M.-ERG in.forest-F P. F-caught  
'Murad caught **Patimat** in the forest.'

# Person

- The clitic set:

	SG	PL
1	<i>=da</i>	
2	<i>=di</i>	
3	<i>(=sa-b)</i>	

- The preterite set:

	SG	PL
1	<i>-d</i>	<i>-d-a</i>
2	<i>-t:i</i>	<i>-t:-a</i>
3	<i>-aj, -in, -i</i>	

# Rules of agreement resolution

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- In intransitive clauses, person agreement is with P
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  - 1,2 (SAP) > 3
- If both arguments are SAPs, the absolutive argument “wins”

- di-l murad us-a-d  
me-ERG M. [M]catch.PFV-PRET-1  
‘I caught Murad.’ (A = 1, P = 3 → 1)
- muradli du usa-d  
‘Murad caught **me**.’ (A = 3, P = 1 → 1)
- dil u usa-t:i  
‘I caught **you**.’ (A = 1, P = 2 → 2)
- u-dil du usa-d  
‘You caught **me**.’ (A = 2, P = 1 → 1)
- murad-li rasul us-aj  
‘Murad caught **Rasul**.’ (A = 3, P = 3 → 3)

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  - ▶ murad-li t'ant'i-b qali b-irq'.u.le=sa-j  
M.-ERG in.T.-N house N-building=COP-M
  - ▶ murad-li t'ant'i-b qali b-irq'.u-le=sa-b  
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'**Murad** is building **a house** in Tanti.'
- The controller is determined by topicality
- Cf. also Sumbatova and Lander (2015, Chapter 5)

- Notably, in Tanti both A and P gender agreement are available even if one of the arguments is a SAP (although P agreement requires a certain “emphasis”)

- ▶ ʕaˁli rurs:i quli-r r-alt.un.ne=s-a-j=de  
 thou:ERG girl in.house-F F-keeping=COP-M=2SG  
 ‘You are keeping the girl at home.’
- ▶ ʕaˁli rurs:i quli-r r-alt.un.ne=s-a-r=de  
 ‘You are keeping the girl home alone.’ (Sumbatova 2014)

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‘You are keeping the girl home alone.’ (Sumbatova 2014)

- Unfortunately, there is no data on what happens when both arguments are SAPs, or when a SAP is in the direct object position



- Sumbatova's solution is to divide the clause into two layers (roughly IP and VP) and situate a zero absolutive argument in the upper layer:

- ▶  $\left[ \Delta_{i(\text{ABS})} \left[ \text{murad-li}_i \text{ t'ant'i-b qali b-irq'-u-le} \right] =\text{sa-j} \right]$
- ▶  $\left[ \Delta_{i(\text{ABS})} \left[ \text{murad-li t'ant'i-b qali}_i \text{ b-irq'-u-le} \right] =\text{sa-b} \right]$



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- An additional confirmation of this idea is that clause-peripheral adverbs may agree with A:
  - ▶  $\left[ \text{ma}^{\text{h}}\text{a}^{\text{m}}\text{mad.li.}\check{\text{s}}:\text{u-w} / \text{-b} \left[ \boxed{\text{rasul-li}} \text{ dig b-uk:-un-ne} \right] =\text{sa-j} \right]$   
 chez.M.-M                      -N R.-ERG    meat N-eating                      COP-M  
 'At Muhammad's place **Rasul** is eating **meat**.' (Sumbatova 2014)
- In general, the analysis seems justified for Tanti based on available data



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M. [M]going be-M[3]  
'Murad is going.'
  - du ʔuq<sup>s</sup>.uŋ li-w=da  
I [M]going be-M=1  
'I am going.'

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- In Sumbatova (2014), they are shown to have the same behaviour as ordinary periphrastic forms
- Using existentials has an important advantage: there is a gender marker in each person



## Auxiliary agreement

- Just like in Tanti, the auxiliary can agree in gender with A in the 3rd person

▶ rasul-li pat'imat j-u:s.u      li-j / li-w  
 R.-ERG    P.                  F-catching    be-F    be-M

‘Rasul is catching Patimat.’

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‘Rasul is catching Patimat.’

- Again, as in Tanti, this seems to correlate with topicality
- However, more research is needed in order to see which factors specifically influence the choice of agreement controller

## Kubachi examples

(stories about Mullah Nasruddin, Šamov 1994)

- ▶ na q:ala.l saʁ.ib, wagzal.li-b čumadan sa  
 now to.Mamedkala when.he.reached at.station-N bag one  
 hambal.li.c:e b-ič:.ib=sa-w  
 to.porter N-gave=COP-M

‘When he reached Mamedkala, at the station he gave his bag to a porter.’

- ▶ jiš.te χulžin d-ač:.ib k<sup>w</sup>i<d>ič.ib.li=sa-d malla.c:e  
 these bag NPL-having.found return<NPL>=COP-NPL to.Mullah

‘Having found the bag, they returned it to the Mullah.’

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- du-dil ha.ʔ.ila-žu-d **si.k'al.dix** ʔa:ʔa-dil duč:i.al  
I-ERG said-ATTR-NPL something hen-ERG at.night  
haʔ.ib-žu-d=sa-d  
said-ATTR-NPL=COP-NPL

(Mullah, why has the judge acquitted you without you even saying anything?) ‘At night the hen has already said **everything** for me.’

- wah, malla, si uk'.u.t.nu, allah-le duna e:k bac.le  
 oh mullah what art.thou.saying Allah-ERG world six in.month  
 a-sa-b=q'al, e:k:-il sa-b b-a:q'.ib-zi-b  
 NEG-COP-N=PTCL six-day COP-N N-done-ATTR-N  
 'Oh, Mullah, what are you saying, God created the world in six days,  
 not months!'
- e:k:-il b-a:q'.ib-zi-w=s-a-w b-uk'.ne dammi=ja=q'el  
 six-day N-done-ATTR-M=COP-M N-that.is.said to.me=also=PTCL  
 b-ak'u.q'a.nnu  
 N-is.known  
 'I do also know that it is said that He has created the world in six  
 days.' (... but would you believe me if I told you that?)

## Agreement in 1st and 2nd persons

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- But when one of the arguments is 1st or 2nd person, and the other is 3rd person, gender agreement can only be with the SAP argument (corresponding to person agreement)

- ▶ di-l pat'imat j-u:s.u      li-w=da / \*li-j=da / \*li-w / \*li-j  
me-ERG P.                  F-catching be-M=1   be-F=1   be-M   be-F  
'I (m.) am catching Patimat.' (1 > 3)
- ▶ pat'imat-li du u:s.u                  li-w=da / \*li-j=da / \*li-w / \*li-j  
P.-ERG      I      [M]catching be-M=1   be-F=1   be-M   be-F  
'Patimat is catching **me** (m.)'



## Agreement in 1st and 2nd persons

- Similarly, when both arguments are SAPs, gender agreement can only be with the absolutive (again, like person agreement)
  - ▶ di-l u j-u:s.u li-j=**di** / \*li-w=di / \*li-w=da / \*li-j=da  
 me-ERG thou F-catching be-F=2 be-M=2 be-M=1 be-F=1  
 ‘I (m.) am catching **you** (f.)’
  - ▶ u-dil du u:s.u li-w=**da** / \*li-j=da / \*li-j=di / \*li-w=di  
 thee-ERG I [M]catching be-M=1 be-F=1 be-F=2 be-M=2  
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 ‘I (m.) am catching **you** (f.)’
  - ▶ u-dil du u:s.u li-w=**da** / \*li-j=da / \*li-j=di / \*li-w=di  
 thee-ERG I [M]catching be-M=1 be-F=1 be-F=2 be-M=2  
 ‘You (f.) are catching **me** (m.)’
- This does not seem to agree well with the idea of a zero absolutive argument: why would it behave in a different way for SAPs?

## Adverb agreement

- Ashti still allows peripheral adverbs to agree in the ergative

▶ wac'a.ci-w / wac'a.ci-j rasul-li pat'imat j-u:s-u li-w  
 in.forest-M in.forest-F R.-ERG P. F-catching be-M  
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  - ▶ “null absolutive” coreferent with P, A agreement should be impossible!
- A better explanation is that such adverbs are in fact secondary predicates ('while being in the forest...')
- Cf. the fact that when the adverb agrees in the ergative, it is preferable to use *-mu:til* 'when':
  - ▶ *wac'a.ci-w-mu:til* *rasul-li pat'imat j-u:s.u li-w*

- Secondary predication also explains why “split control” of agreement on the adverb is possible in Tanti:

▶ dars.li.ja-**b**  $\Delta_{i+j}$  [ ja=ra musa-li<sub>i</sub> gazet:e d-uč'.un.ne ], [ ja=ra  
 at.lesson-HPL or=ADD M.-ERG newspapers NPL-reading or=ADD  
 pat'imat-li<sub>j</sub> šajt'un.t.a.lla surrat:e d-irq'.u.le ] =sa-**b**  
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- Sumbatova's explanation is that the zero absolutive has the A participants of the coordinated lower clauses as its split antecedents
- But it seems equally plausible to assume that we deal with a secondary predication whose zero subject gets its reference according to the standard rules

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- Extrapolated to the 3rd person, it means that there is also competition between 3rd person controllers
  - SAP vs. non-SAP SAP wins
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- The agreement rule stays the same
- This is reminiscent of a typical proximate-obviative system (cf. e.g. Aissen 1997)



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- But the terms “person” and “gender” agreement are misleading anyway
- “Gender” agreement may involve person (cf. Corbett 2013 for Archi)
- In Dargwa (incl. Ashti), the same phenomenon as in Archi occurs: the neuter pl. marker *-d-* is used for 1/2PL arguments

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- Last example: “gender” agreement does genuinely mark person features ↻



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- Each clause has two domains and two targets (Sumbatova 2014), so we can define separate rules for each

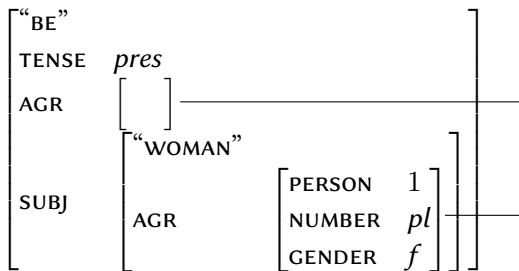
# Feature sharing

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- *¡Qué desgraciad-as somos las mujer-es!* ‘How unfortunate we women are!’ (Ackema and Neeleman 2013)

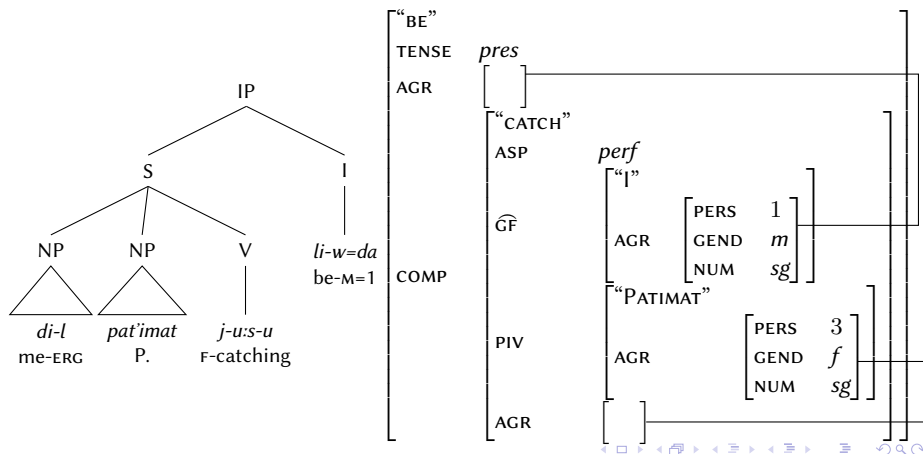


## Feature sharing in Dargwa

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- E.g., a clause with ergative “person” agreement will have the following c- and f-structures (ergativity as in Falk 2006,  $A = \widehat{GF}$ ,  $P/S = PIV$ ):



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- This allows us to do away with the two tiers of clause structure

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  - ▶ second-level perphrastic forms, with the auxiliary having its own TAM features
    - ★ murad-li rasul ulh-an-ni uχ-ij=di  
M.-ERG R. [M]see.IPFV-FUT-3 [M]be.PFV-INF=PST  
'Murad probably would have seen Rasul.'
  - ▶ two negation types
    - ★ at:ij du a-w-ik:ul j-uχut:i, j-at<j>iš:i jani.j  
thee:DAT I NEG-M-loving F-if.you.are F-go.away<F> from.here
    - ★ at:ij du w-ik:ul a-j-uχut:i, j-at<j>iš:i jani.j  
'If you do **not** love me, go away.'

- This can be achieved by using the following lexical entries for the verb and auxiliary:

▶ IP → S I  
(↑ COMP)=↓ ↑=↓

▶ S → NP\* V  
(↑ GF)=↓ ↑=↓

▶ *b-i:q-ul* V (↑ PRED) = 'do⟨GF PIV⟩'  
(↑ AGR) = (↑ PIV AGR)  
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 { (↑ AGR) = (↑ COMP GF AGR) |  
 (↑ AGR) = (↑ COMP PIV AGR) }  
 (↑ AGR PERS) = *c 1*  
 (↑ AGR GEND) = *c m*  
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$$\text{AGR-2 } (\uparrow \text{ AGR PERS}) = 2$$

$$\text{AGR-1 } (\uparrow \text{ AGR PERS}) = 1$$

$$\text{AGR-3}_{\text{TOP}} (\uparrow \text{ AGR PERS}) = 3$$

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- The ranking for Ashti:  $\text{AGR-1} \vee \text{AGR-2} > \text{AGR-3}_{\text{TOP}} > \text{AGR-PIV} > \text{AGR-}\widehat{\text{GF}}$ 
  - on constraint disjunction see Crowhurst and Hewitt (1997)

## Some sample tableaux

- A = 1p m sg, P = 3p<sub>TOP</sub> f sg

di-l pat'imat j-us-u ...	AGR-1 $\vee$ AGR-2	AGR-3 <sub>TOP</sub>	AGR-PIV	AGR- $\widehat{GF}$
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- A = 1p m sg, P = 2p f sg

di-l u j-us-u ...	AGR-1 $\vee$ AGR-2	AGR-3 <sub>TOP</sub>	AGR-PIV	AGR- $\widehat{GF}$
li-w=da (A)		*	*!	
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- If we keep the clause structure multi-tiered, agreement patterns can be tied to clausal tiers rather than features
- The OT approach of Belyaev (2013), slightly modified, can account for the relevant data

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