"Verbal case" in Ashti Dargwa

Trivia Ashti Dargwa, like other Dargwa languages, has hierarchical person agreement (Sumbatova 2011; Belyaev 2013):

- in intransitive clauses, the verb or auxiliary agrees with S;
- in transitive clauses, the verb agrees with either $\mathcal{A}$ or $\mathcal{P}$:
  - if $\mathcal{A}$ is SAP (1st or 2nd person) while $\mathcal{P}$ is non-SAP (3rd person), the verb agrees with $\mathcal{A}$;
  - if $\mathcal{P}$ is SAP (1st or 2nd person) while $\mathcal{A}$ is non-SAP (3rd person), the verb agrees with $\mathcal{P}$;
  - if both $\mathcal{A}$ and $\mathcal{P}$ are SAPs, the verb agrees with $\mathcal{P}$.

Case alignment is ergative. Gender agreement is always with the absolutive (S/P).

Agreement "switches". While most finite forms in Ashti (both synthetic and periphrastic) do not overtly indicate which of the arguments ($\mathcal{A}$ or $\mathcal{P}$) controls person agreement, a minority of synthetic forms (Conditional, Imperative, and the seldom-used Habitual) have markers *-i-* and *-u-* that occur before the person markers (in the 1st and 2nd person only) and indicate whether the agreement controller is $\mathcal{A}$ or $\mathcal{S}/\mathcal{P}$, respectively (1)–(2). Reflexive clauses use *-i-* (3). Thus the full paradigm of Conditional person markers is as follows:

	$\mathcal{P}$		
$\mathcal{A}$	1	2	3
1	-i-lli	-u-t:i	-i-lli
2	-u-lli	-i-t:i	-i-t:i
3	-u-lli	-u-t:i	-a:li

Initial generalization I assume that Dargwa syntax is accusative (standard SUBJ vs. OBJ); if Falk's (2006) theory is used, as in Belyaev (2013), little will change in the analysis.

The most straightforward version of an LFG analysis would be to state the generalization "as is": *-i-* marks the SUBJ of transitive verbs while *-u-* either marks the OBJ of transitives or SUBJ of intransitives (i).

(i) *-i-* $(\uparrow \text{AGR}) =_c (\uparrow \text{SUBJ AGR})$ $(\uparrow \text{OBJ})$

-u- $\{(\uparrow \text{AGR}) =_c (\uparrow \text{SUBJ AGR})$ $\neg(\uparrow \text{OBJ}) \mid$ $(\uparrow \text{AGR}) =_c (\uparrow \text{OBJ AGR})\}$

However, this incorrectly predicts both *-i-* and *-u-* for reflexives, while, in fact, only *-i-* is possible (3).

An alternative is to keep the definition of *-i-* but redefine *-u-* as the negative of *-i-*, i.e. covering all contexts where *-i-* does not apply:

(ii) $\text{@AGENTAGR} :=$ $(\uparrow \text{AGR}) =_c (\uparrow \text{SUBJ AGR})$ $(\uparrow \text{OBJ})$

-i- @AGENTAGR

-u- $\neg\text{@AGENTAGR} \equiv$ $\{(\uparrow \text{AGR}) \neq (\uparrow \text{SUBJ AGR}) \mid$ $\neg(\uparrow \text{OBJ})\}$

That is, either the person agreement features are **not** those of the subject, **or** the verb is intransitive. This correctly predicts the distribution in (1)–(2) while allowing only *-i-* in reflexive contexts.

However, this straightforward distribution faces two problems.

First mystery: Intransitives As shown in (2), intransitive verbs in Ashti normally use *-u-*, which is consistent with the fact that agreement is controlled by the absolutive. However, in certain cases, *-i-* can be used instead of *-u-* (Belyaev 2016), without any change in case marking, see (4)–(5) and (5).

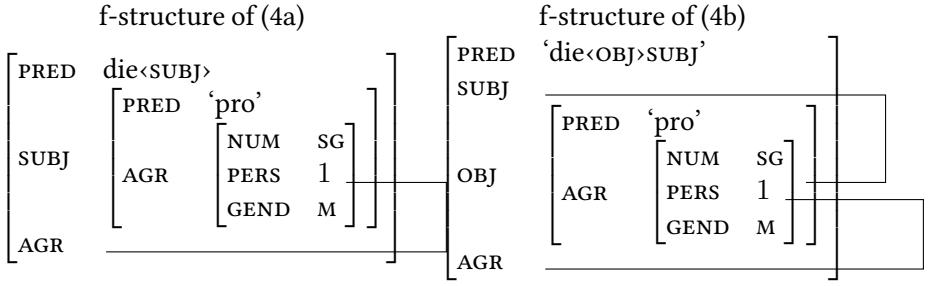
The choice of *-i-* vs. *-u-* is not determinned lexically; this replacement seems to be possible for any verb, making Ashti similar to so-called "fluid S" (Dahlstrom 1983) split intransitive languages. As indicated in the translations, using *-i-* seems to convey various additional effects: lower agenitivity / control over the event (4) and atelicity (5).

Second mystery: Affectives. Ashti, like most other Daghestanian languages, has a class of so-called affective verbs, whose most prominent argument is an Experiencer rather than an Agent ('see', 'hear', ''know', etc.). These verbs mark the Experiencer with the dative case. In Ashti, the dative argument behaves just as the ergative with respect to agreement, i.e. the same hierarchical rules apply (6). However, as also seen in (6), synthetic forms invariably use the marker *-i-* (which otherwise encodes person agreement with $\mathcal{A}$), regardless of whether $\mathcal{A}$ or $\mathcal{P}$ is the person agreement controller.

Solution In what follows, I will attempt to resolve these mysteries by assuming that the definition in (ii) is basically correct, and show that this assumption leads one to rather unexpected results.

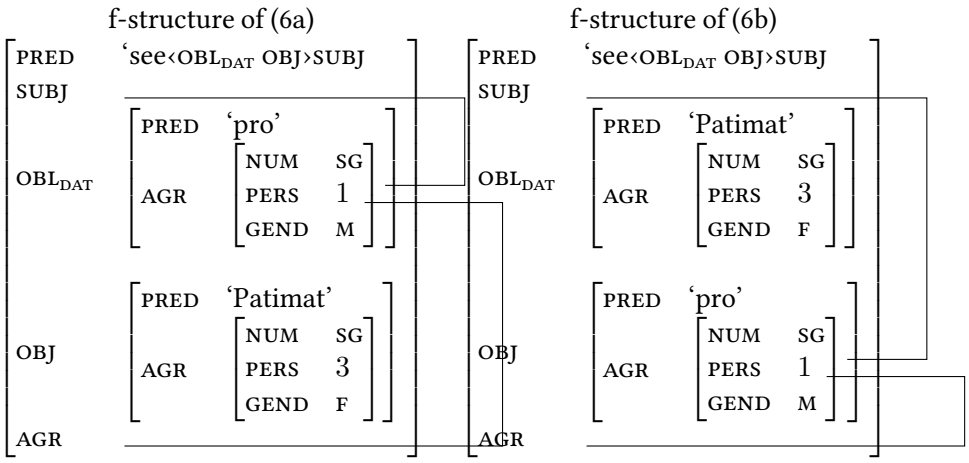
For **intransitives**, the use of *-i-*, according to the definition in (ii), means that (a) the verb has both SUBJ and OBJ; (b) the agreement controller is the SUBJ. As seen from examples like (5), the case marking of the agreement controller does not change: it is still the absolutive argument. Hence, the agreement controller must be *both* the (absolutive) direct object and the transitive subject. This can be achieved by postulating that such verbs only have a semantic OBJ argument; the SUBJ is a non-thematic argument that is structure-shared with OBJ. This is shown in (3) on the right.

(iii)



With **affective** verbs, the constant use of *-i-* means that agreement has to always happen with the transitive SUBJ ($\mathcal{A}$), even in spite of apparent agreement with $\mathcal{P}$. A possible solution is to assume that, like *-i-*marked intransitives, affective verbs have SUBJ as a non-thematic argument. The two thematic arguments are OBL_{DAT} (the Experiencer) and OBJ (the Stimulus). The subject can be structure shared with either. This ensures that, whoever becomes the agreement controller, it will be a subject in a transitive clause (i.e. in a clause that also has a direct object).

(iv)



Discussion The semantic effects of the choice of *-u-* vs. *-i-* with intransitive verbs in (4)–(5) are strikingly similar to the opposition of unaccusative vs. unergative verbs in those languages where the choice is not purely lexical, see i.a. Perlmutter (1978) and Hout (2004). Therefore, it is instructive that rigidly following the definition in (ii) leads one to an analysis that generally mirrors the classical transformational treatment of unaccusativity. While the resulting structures look exotic, the behaviour of affective verbs casts doubt on the possibility of a purely semantic analysis. In the presentation, I will discuss the analysis and its syntactic implications in more detail, as well as compare it to other LFG approaches to unaccusativity (Bresnan and Zaenen 1990; Zaenen 1993).

Belyaev, O. 2013. "Optimal agreement at m-structure." In *Proceedings of the LFG13 Conference,* 90–110. Stanford, CA. **Belyaev, O. I.** 2016. "Funkcija tematičeskix glasnyx v aštynskom: perexodnost', soglasovanie ili kontroliruemost'?" [Thematic vowels in Ashti: Transitivity, agreement or control?] *Acta Linguistica Petropolitana* 12 (1): 27–39. **Bresnan, J., and A. Zaenen**. 1990. "Deep unaccusativity in LFG." In *Grammatical relations: a cross-theoretical perspective,* 45–57. Stanford, CA. **Dahlstrom, A.** 1983. "Agent-patient languages and split case marking systems." In *Proceedings of the Ninth Annual Meeting of the Berkeley Linguistics Society,* 37–46. **Falk, Y. N.** 2006. *Subjects and Universal Grammar: an explanatory theory.* Cambridge. **Hout, A. van**. 2004. "Unaccusativity as telicity checking." In *The unaccusativity puzzle: explorations of the syntax–lexicon interface,* 60–83. Oxford. **Perlmutter, D.** 1978. "Impersonal passives and the unaccusative hypothesis." In *Papers from the Annual Meeting of the Berkeley Linguistic Society,* 4:157–189. **Sumbatova, N.** 2011. "Person hierarchies and the problem of person marker origin in Dargwa: facts and diachronic problems." In *Tense, aspect, modality and finiteness in East Caucasian languages,* 131–160. Bochum. **Zaenen, A.** 1993. "Unaccusativity in Dutch: integrating syntax and lexical semantics." In *Semantics and the lexicon,* 129–161. Dordrecht.

Examples

(1) a. $\mathcal{A}$ agreement: *-i-*

u-dil *id* *b-us-**i**-t:i* …
thou-ERG that N-catch.PFV-A-COND.2[SG]
'If **you** (sg.) catch it…'

b. $\mathcal{P}$ agreement: *-u-*

id-dil *u* *us-**u**-t:i* …
that-ERG thou [M]catch.PFV-S/P-COND.2[SG]
'If it catches **you**…'

(2) $\mathcal{S}$ agreement: *-u-*

nus:a *d-ax-**u**-d-a* …
we 1PL-go.IPFV-S/P-1-PL
'If **we** go…'

(3) reflexive: *-i-*

di-l *du* *w-ʡaqˁ-ʡaqˁ-**i**-lli* …
I-ERG I M-wound.PFV-CAUS-A-COND.1[SG]
'If I wound myself…'

(4) a. *-u-* with intransitives: lack of control

*ka-mma-w-i:k-**u**-t*
DOWN-NEG-M-fall.IPFV-S/P-2[SG]
'[be careful,] do not fall [by accident]'

b. *-i-* with intransitives: agentivity

*ka-mma-w-i:č-**i**-t*
DOWN-PROH-fall.IPFV-A-2[SG]
'do not fall [, make an effort]'

(5) a. *-u-* with intransitives: telicity

pat'imat.li-š:u *w-ax~max-**u**-t*
P.-APUD[LAT] M-go.IPFV~PROH-S/P-2[SG]
'do not go to Patimat'

b. *-i-* with intransitives: atelicity

*w-aš~maš-**i**-t*
M-go~PROH-A-2[SG]
'do not go [anywhere]'

(5) retention of absolutive subject marking with *-i-*

du *w-ibč'-**i**-lli,* *qal* *gal.li-j* *d-ik:-a*
I M-die.PFV-A-COND.1SG house son-DAT NPL-give.PFV-IMP.SG
'If **I** die, give the house to (my) son.'

(6) affective verbs: invariably *-i-*

a. *dam* *pat'imat* *j-ʯulħ-**i**-d* / **j-ʯulħ-**u**-d*
I.DAT P. F-see.IPFV-A-1[SG]
'**I** see Patimat.'

b. *pat'imat* *du* *ʔʯulħ-**i**-d* / **ʔʯulħ-**u**-d*
P. I [M]see.IPFV-A-1[SG]
'Patimat sees **me**.'