Affixation within affixation in Andi

STEVEN KAYE, SURREY MORPHOLOGY GROUP

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Setting the scene: Stump (2019) on ‘rule conflation’ in Noon

Table 3 (detail). Inflection of the adjective YAK ‘big’ in Noon

			Noun class	Definite Location 2				
				–2	**–1**	**Stem**	**1**	**2**
Non-diminutive	Inanimate	sg	1	*w-*	*i-*	*yak*	*-w*	*-um*
			2	*f-*	*i-*	*yak*	*-f*	*-um*
			3	*m-*	*i-*	*yak*	*-m*	*-um*
			4	*k-*	*i-*	*yak*	*-k*	*-um*
			5	*p-*	*i-*	*yak*	*-p*	*-um*
			6	*j-*	*i-*	*yak*	*-j*	*-um*
		pl	1–3	*c-*	*i-*	*yak*	*-c*	*-um*
			4–6	*t-*	*i-*	*yak*	*-t*	*-um*
	Animate	sg		*y-*	*i-*	*yak*	*-y*	*-um*
		pl		*ɓ-*	*i-*	*yak*	*-ɓ*	*-um*
Diminutive		sg		*j-*	*i-*	*yak*	*-j*	*-um*
		pl		*t-*	*i-*	*yak*	*-t*	*-um*

(Soukka 2000: 86ff.)

Plan of the talk

- Introduction to Andi
  - Location and typological basics
- Fundamentals of agreement and case
  - Three distinct agreement systems; core vs spatial cases
- The affective case
  - Function and form
- Justifying the micromorphological view
  - Why do we need ‘affixation within affixation’ here?
- In lieu of a conclusion: a connection with the spatial cases?

1. Introduction to Andi

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Introduction to Andi

Andi is spoken in a dozen settlements in highland Dagestan, Russian Federation, by c.20,000 people.

It is a typical Nakh-Dagestanian language in most respects, featuring:

- basic SOV / 'left-branching' syntax, though with substantial flexibility to manipulate constituent order for information-structural purposes
- relatively little morphophonological complexity, making morphemic segmentation straightforward most of the time
- ergative morphosyntactic alignment, in which the absolutive argument controls clausal agreement:

(1) den-ni hinc'o **šammi** vs. den-ni hinc'o-bil **š:ari**
I-ERG stone(IV)[SG] SG.throw.AOR I-ERG stone(IV)-PL PL.throw.AOR
'I threw a stone.' 'I threw stones.'

2. Fundamentals of agreement and case

The features relevant to **agreement** in Andi are number (SG vs PL) and gender (I-V). Targets can be sensitive to these features within the NP and at clause level.

The system of agreement exponence is fairly intricate, involving three formal sub-systems:

- A plural suffix of the form ***-(V)l***
  - applies to practically all NP-internal modifiers (and elsewhere)

(2)	t'ulu	<u>wošo</u>	vs.	t'ul-**ol**	<u>woš-ul</u>
	wicked	boy(I)[SG]		wicked-**PL**	boy(I)-PL
	'wicked boy'			'wicked boys'	

Agreement exponence

- Stem alternation (or even full suppletion) for number
  - a lexical property of *some* verbs; many invariable verb stems also exist

šammi, pl. **šːari** ‘throw’:

(3) den-ni hinc’o **šammi** vs. den-ni hinc’-obil **šːari**
l-ERG stone(IV)[SG] SG.throw.AOR l-ERG stone(IV)-PL PL.throw.AOR
‘I threw a stone.’ ‘I threw stones.’

-uq’i, pl. **-aq’i** ‘drive’:

(4) den-ni zi^{n}w b-**uq’i**-r vs. den-ni zinol j-**aq’i**-r
l-ERG cow(III)[SG] III.SG-SG.drive-PROG l-ERG cow(III).PL III.PL-PL.drive-PROG
‘I am driving the cow.’ ‘I am driving the cows.’

Agreement exponence

- Consonantal GN (gender-number) affix

  - a lexical property of *some* verbs, *some* adjectives, *some* numerals, etc.

	I	II	III	IV	V
SG	**w**	**j**	**b**	**b**	**r**
PL	**w**	**j**	**j**	**b**	**r**

Prefixal or suffixal placement is partly lexically specified, e.g. suffixal on ***šu-GN*** ‘good’:

(5) **šu-b** χʷej vs. **šu-j-il** χʷedul

good-III dog(III)[SG] good-III.PL-PL dog(III).PL

‘good dog’ ‘good dogs’

Case morphology

Case inflection is suffixal, using the same set of suffixes in both singular and plural.

- Core cases in Andi are the absolutive, ergative, genitive, dative, and affective.

‘shirt’	SG	PL
absolutive	gurdo	gurdibol
ergative	gurdi-**di**	gurdiba-**di**
genitive*	gurdi-**ƛi (-ƛ-ol)**	gurdiba-**ƛi (-ƛ-ol)**
dative	gurdi-**ɬu**	gurdiba-**ɬu**
affective*	gurdi-**bo**	gurdiba-**bo**

(Kaye 2023: 59)

Case morphology

- Spatial case marking is ‘two-dimensional’, expressing both LOCALIZATION and *orientation*. Thus, for example, the SUB-*elative* case **N-ƛ’ikːu** means ‘from beneath N’:

	essive	*lative*	*elative*
IN	-la	-lo, -di	-la-kːu
INTER	-ƛi	-ƛi	-ƛi-kːu
AD	-χa	-χo	-χa-kːu
APUD	-qi	-qi	-qi-kːu
SUB	-ƛ’i	-ƛ’i	**-ƛ’i-kːu**
SUPER	-ʔa	-ʔo	-ʔa-kːu
CONT	-č’u	-č’u	-č’u-kːu

(Salimov 2010: 99)

3. The affective case

The affective case encodes the experiencer argument (6), the causee of a transitive verb (7), and the complement of certain postpositions, e.g. *badi* ‘against’ (8).

- (6) du-**bo** anɬi=dile hundo-b quj?
  you.SG.OBL-AFF hear.AOR=Q DEM-IV noise(IV)[SG]
  ‘Did **you** hear that noise?’ (Kaye 2023: 61)

- (7) hege-š-di harč’-onɬi kino jecːu-**bo**
  DEM-I.SG.OBL-ERG watch-CAUS.AOR film(IV)[SG] sister(II).SG.OBL-AFF
  ‘He made his **sister** watch a film.’ (Rochant 2018: 81)

- (8) tušman-š-di hege-šːu-**bo** badi b-ihu χalʔi elto
  enemy(I)-SG.OBL-ERG DEM-I.SG.OBL-AFF against IV-much folk(IV)[SG] send.AOR
  ‘The enemy sent out a large crowd of people against **him**.’ (Kaye 2023: 59)

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  ‘The enemy sent out a large crowd of people against **him**.’ (Kaye 2023: 59)

The affective shows agreement

Compare (9a-b), identical except for the identity of the stimulus.

- (9a) Aminati-**wo** en-ƛi=gu ima ǯiʔ-e
  Aminat(II)-AFF.I LOG.OBL-GEN=EMPH father(I)[SG] love-HAB
  'Aminat loves her father.'
- (9b) Aminati-**jo** en-ƛi=gu baba ǯiʔ-e
  Aminat(II)-AFF.II LOG.OBL-GEN=EMPH mother(II)[SG] love-HAB
  'Aminat loves her mother.' (Kaye 2023: 61)

The affective case suffix is sensitive to the gender-number value of the absolutive argument!

What might have been

- The agreeing affective suffix

  - sensitive to the gender and number of the absolutive clausal argument

	I	II	III	IV	V
SG	**-gu**	**-ša**	**-ro**	**-bo**	**-je**
PL	**-da**	**-be**	**-χi**	**-se**	**-ƛu**

What there actually is

- The agreeing affective suffix

  - sensitive to the gender and number of the absolutive clausal argument

	I	II	III	IV	V
SG	**-wo**	**-jo**	**-bo**	**-bo**	**-ro**
PL	**-wo**	**-jo**	**-jo**	**-bo**	**-ro**

What there actually is

- Consonantal GN (gender-number) affix

  - a lexical property of *some* verbs, *some* adjectives, *some* numerals, etc.

	I	II	III	IV	V
SG	**-w**	**-j**	**-b**	**-b**	**-r**
PL	**-w**	**-j**	**-j**	**-b**	**-r**

What there actually is

- The agreeing affective suffix

  - sensitive to the gender and number of the absolutive clausal argument

	I	II	III	IV	V
SG	**-wo**	**-jo**	**-bo**	**-bo**	**-ro**
PL	**-wo**	**-jo**	**-jo**	**-bo**	**-ro**

Evidently the affective suffix does not constitute a fourth type of agreement marker in Andi.
Instead, it contains one we are already familiar with: the **GN** affix.

In that case, do unitary glosses like **-AFF.**IV (Kaye 2023) capture what is going on?
We are really dealing with a bipartite case suffix, with GN 'built in': **-‹**IV**›AFF** etc.

What there actually is

- The agreeing affective suffix

  - sensitive to the gender and number of the absolutive clausal argument

	I	II	III	IV	V
SG	**-‹w›o**	**-‹j›o**	**-‹b›o**	**-‹b›o**	**-‹r›o**
PL	**-‹w›o**	**-‹j›o**	**-‹j›o**	**-‹b›o**	**-‹r›o**

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4. Justifying the micromorphological view

Couldn't we just say that this case suffix results from one suffixation (-GN) followed by another (-*o*)?

After all:

- Unlike the situation in Noon, GN really **can** appear as a suffix: we have seen it in *šu-GN* 'good'
- In fact, -GN **does** appear in the case paradigm, marking the genitive of gender I nominals:

shirt(V)	SG
absolutive	gurdo
genitive	gurdi-**ƛi**

father(I)	SG
absolutive	ima
genitive	imu-**GN**

- (10) imu-**r** reʔa vs. imu-**b** χʷej
  father(I).SG.OBL-V hand(V)[SG] father(I).SG.OBL-III.SG dog(III)[SG]
  'father's hand' 'father's dog'

Justifying the micromorphological view

It's true that functionally, the genitive and the affective are not connected:

- Affective case marks certain non-canonical subjects and adpositional complements; genitive case does neither
- Their agreement is of different kinds: affectives are targets for clause-level agreement, while genitives agree within the NP

But this is not necessarily a problem: parasitic or 'Priscianic' formations certainly exist.

So <u>why not</u> identify the affective formation as **[stem-GN]-*o*** ? Some reasons:

- -GN produces the genitive of nouns for male humans only; so for most lexemes, **[stem-GN]** is non-existent
- -*o* does not exist except in this precise context (but stay tuned…)

Justifying the micromorphological view

- The affective suffix **-‹GN›o** only operates as a unit. It complements the other case suffixes and resembles them in shape:

core case	
absolutive	**(-Ø)**
ergative	**-di**
genitive	**-ƛi**
dative	**-ɬu**
affective	**-‹GN›o**

spatial case	*essive*
IN	**-la**
INTER	**-ƛi**
AD	**-χa**
APUD	**-qi**
SUB	**-ƛ’i**
SUPER	**-ʔa**
CONT	**-č’u**

The directional suffix -‹GN›a

Affective suffix **-‹GN›o** is not structurally unique: cf. 'directional' adverbial suffix **-‹GN›a**.

e.g. in *iši-‹GN›a* 'home(wards)':

- (11a) Abdullah-di iši-**‹b›a** <u>ħajman</u> b-uq'i
  Abdullah(I)-ERG home-‹III.SG›DIR sheep(III)[SG] III.SG-SG.drive.AOR
  'Abdullah drove the sheep[SG] **home**.'
- (11b) Abdullah-di iši-**‹j›a** <u>ħajman-ol</u> j-aq'i
  Abdullah(I)-ERG home-‹III.PL›DIR sheep(III)-PL III.PL-PL.drive.AOR
  'Abdullah drove the sheep[PL] **home**.' (Kaye 2025: 17)

Other examples include *ɬo-‹GN›a* 'upwards'; *ogi-‹GN›a* 'sideways'; *GN-eχudi-‹GN›a* 'back(wards)'.

Again, the vowel *-a* by itself does not do this; but **iši-GN, *ɬo-GN, *ogi-GN* without *-a* do not exist.

The directional suffix -‹GN›a

See also the agreeing adverbs in **-‹GN›a-kːu**, (i.e. directional + elative), encoding the meaning ‘in the approximate area of’:

e.g.

- (12a) hoɬːu-**‹b›a**-kːu b-ihu=gu ri’ƛ̌i k’amm-e
  here-‹IV›DIR-EL IV-much=INT meat(IV)[SG] eat-HAB
  ‘Around here (we) eat a great deal of meat.’
- (12b) hoɬːu-**‹r›a**-kːu r-ihu=gu turti k’amm-e
  here-‹V›DIR-EL V-much=INT urbech(V)[SG] eat-HAB
  ‘Around here (we) eat a great deal of *urbech*.’ (Kaye 2025: 18)

Summing up

Let us take stock of the Andi facts:

- The affective suffix agrees with the clausal absolutive argument, but this is **not** a fourth independent type of agreement marker: it contains the familiar consonantal GN (= *w, j, b, r*)
- There is no argument in favour of the structure **[[stem-GN]-*o*]** - aside from unease with micromorphology.
- Meanwhile, it is natural to take **-GNo** as a genuine unit of analysis: it operates as a single item at the level of the case paradigm, while being obviously bipartite
- It finds a parallel elsewhere in the language: the adverbial suffix **-GNa**
  - These are affixes which have themselves been 'pre-compiled' by affixation
  - Perhaps reminiscent of the Noon phenomenon, likewise involving agreement consonants

5. A connection with the spatial cases?

The affective serves as a ‘core’ case, but it appears to have links with the spatial domain:

- (13) tušman-š-di hege-šːu-**‹b›o** badi b-ihu χalʔi elto
  enemy(I)-SG.OBL-ERG DEM-I.SG.OBL-‹IV›AFF against IV-much folk(IV)[SG] send.AOR
  ‘The enemy sent out a large crowd of people against **him**.’ (Kaye 2023: 59)

- (14) Isa rešno-**‹w›o** w-ulo-mado
  Jesus(I) heaven(V).SG.OBL-‹I›AFF I-SG.go-PROG
  ‘Jesus ascends to heaven.’ (*Luke* 24:50–53, section heading)

The encoding of experiencers and causees can plausibly be linked with spatial use too (e.g. X knows/hears/hates Y < *Y is known/heard/hateful **to X**)

Back to the spatial forms

- Consider again the spatial case system: three localization series (IN, AD, SUPER) are characterized by an **a/o/ak:u** alternation. Might AFF historically belong in this company?

	essive	*lative*	*elative*
IN	**-la**	**-lo**, -di	**-la-k:u**
INTER	-ƛi	-ƛi	-ƛi-k:u
AD	**-χa**	**-χo**	**-χa-k:u**
APUD	-qi	-qi	-qi-k:u
SUB	-ƛ’i	-ƛ’i	-ƛ’i-k:u
SUPER	**-ʔa**	**-ʔo**	**-ʔa-k:u**
CONT	-č’u	-č’u	-č’u-k:u

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	essive	*lative*	*elative*
IN	**-la**	**-lo**, -di	**-la-k:u**
AD	**-χa**	**-χo**	**-χa-k:u**
SUPER	**-ʔa**	**-ʔo**	**-ʔa-k:u**

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	essive	*lative*	*elative*
IN	**-la**	**-lo**, -di	**-la-k:u**
AD	**-χa**	**-χo**	**-χa-k:u**
SUPER	**-ʔa**	**-ʔo**	**-ʔa-k:u**
???	**-GNa (> DIR ?)**	**-GNo (> AFF ?)**	**-GNa-k:u (> APPROX ?)**

Spatial cases across the family

Spatial case forms of nominals across the family can even be ‘three-dimensional’, the maximal schema being:

Inflectional stem – LOCALIZATION – *orientation* – deixis etc.

- Northern Tabasaran (*TALD* 054 by A. Nogina, citing Magometov 1965: 119)

(15) *daʁžilantina*

daʁži	**-l**	**-an**	**-tina**
mountain.OBL	**-SUPER**	**-ABL**	**-THITHER**

‘from up in the mountains, in the direction away from here’

Spatial cases across the family

Across the family, GN ‘affixation within affixation’ can appear in any of those three spatial slots:

	localization	orientation	deixis etc.
Lak			-‹**GN**›aj attenuative
Tukita		-‹**GN**›a elative	
Dargwa		-‹**GN**› essive	
Avar	-ni‹**GN**› IN		

(*TALD* 056, R. Popova)

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Avar	-ni‹**GN**› IN		
? earlier Andi ?	-‹**GN**›a		

(*TALD* 056, R. Popova)

Thank you for your attention!

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