

Ergative is not inherent: Evidence from *ABA in suppletion and syncretism

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1. The ABC of *ABA effects: Bobaljik 2012. — 2. *ABA in case-driven suppletion. — 3. *ABA in systematic case syncretism. — 4. Implications for the theory of syncretism. — 5. Ergative is not inherent. — 6. Leaving genitives out of the hierarchy.

Roadmap

- **Background:** Smith *et al.* (2016) show there is *ABA in case suppletion.
- **Empirical claim:** Exactly the same *ABA effect is found in case syncretism.
- **Implications for the theory of syncretism:** Case syncretism is constrained by the logic of underspecification. Unconstrained Impoverishment cannot capture this.
- **Implications for case theory:** In both suppletion and syncretism, ergative patterns with accusative, not with inherent cases—most clearly so in tripartite systems.

1 The ABC of *ABA effects: Bobaljik 2012

- (1) Suppletion in comparison: ‘good’ in New-Testament Greek, Gothic, and Latin

POS	CMPR	SPRL	
A	A	A	<i>agath-ós ~ agath-óteros ~ agath-ótatos</i>
A	B	B	<i>gôd ~ sêl-ra ~ sêl-ost</i>
A	B	C	<i>bon-us ~ mel-ior ~ opt-imus</i>
A	B	A	Unattested

Bobaljik 2012: *ABA is not just a feature of Indo-European, but holds universally.

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(2) **Bobaljik's Comparative-Superlative Generalization (part 1)**

If both the comparative and the relative superlative are synthetic, and the comparative of an adjective is suppletive with respect to the positive, then the corresponding relative superlative is also suppletive with respect to the positive.

Bobaljik's explanation has two components:

- (i) an independently motivated containment hierarchy [[[POS] CMPR] SPRL]
- (ii) DM's independently motivated mechanism of Vocabulary Insertion

(3)		POS	CMPR	SPRL	
	a.	Cimbrian	<i>šüa</i>	<i>šüan-ar</i>	<i>šüan-ar-ste</i> 'pretty'
	b.	Hungarian	<i>nagy</i>	<i>nagy-obb</i>	<i>leg-nagy-obb</i> 'big'
	c.	Ubykh	<i>nüs[°]</i>	<i>ç'a-nüs[°]</i>	<i>a-ç'a-nüs[°]</i> 'pretty'

If one adopts the containment hierarchy, then one can derive *ABA for free within DM.

(4) *Underspecification* (cf. Halle 1997: 428)

A Vocabulary Insertion rule may apply only if its structural description, including contextual restrictions, constitutes a (proper or improper) subset of the context of application being considered.

(5) *Elsewhere Principle* (cf. Kiparsky 1973: 94)

If two VI rules R_1 and R_2 may apply to a given terminal node, and the context for application of R_2 is contained in that of R_1 , then R_1 applies and R_2 does not.

With this much in place, let's now try to get a fictional ABA *good ~ bett-er ~ good-est*.

- (6)
- | | |
|----|--|
| a. | $\sqrt{\text{GOOD}} \rightarrow \text{bett-} / __] \text{CMPR}^0$ |
| b. | $\sqrt{\text{GOOD}} \rightarrow \text{good}$ |

As for the superlative, we can only do either of two things with it:

- either we stipulate a third VI rule specifically dedicated to it, ending up with ABC;
- or we say no more about it, and assume no VI rules other than (6). The two allomorphs *good* and *bett-* will then compete to realize the root in the superlative, under the assumption that the superlative contains CMPR^0 ; but then the Elsewhere Principle will let the more specific *bett-* win out, resulting in an ABB pattern.

The unattested *ABA pattern is thus excluded in principle.

2 *ABA in case-driven suppletion

(7) *Smith et al.'s (2016) subgeneralization 1:*

If an accusative is suppletive with respect to the corresponding nominative, so are all the corresponding inherent cases.

Icelandic, 2SG		Brahui, 2SG	
NOM	þú	NOM	nī
ACC	þig	ACC	nē
DAT	þér	DAT	nēki

Table 1: AAA patterns (Einarsson 1949: 68; Andronov 1980: 49)

Icelandic, 1SG		Brahui, 1SG	
NOM	ég	NOM	ī
ACC	mig	ACC	kane
DAT	mér	DAT	kanki

Table 2: ABB patterns (Smith *et al.* 2016: 14, 48)

German, 3SG.F		Mangarayi, 2SG	
NOM	sie	NOM	ñangi
ACC	sie	ACC	ñan
DAT	ihr	DAT	ñanga

Table 3: AAB patterns (Merlan 1982: 102)

Smith *et al.* (2016) focus exclusively on pronouns.¹ However, less radical instances of suppletive allomorphy can also be found in nouns and adjectives: in these cases, allomorphy is typically restricted to the last formative of the stem (cf. McFadden 2018).

Latin, ‘old man’		Finnish, ‘person’	
NOM	sen-ek-s	NOM	ihmi-nen
ACC	sen-∅-em	ACC	ihmi-se-n
DAT	sen-∅-ī	INES	ihmi-se-ssä

Table 4: ABB in stem-formative allomorphy (McFadden 2018: 4–5)

‘big’, SG.M		‘dream’	
NOM	méga-s	NOM	ónar
ACC	méga-n	ACC	ónar
DAT	megálō	DAT	onéirat-i

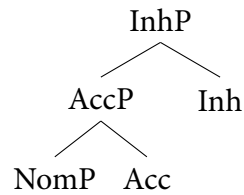
Table 5: AAB in Ancient Greek stem-formatives

Once again, *ABA is unattested (cf. McFadden 2018).

- (8) ‘[A]s a form of reverse engineering, we may work backward from cases in which an *ABA pattern is observed in order to consider those patterns indicative of structural containment’ (Bobaljik 2015: 7).

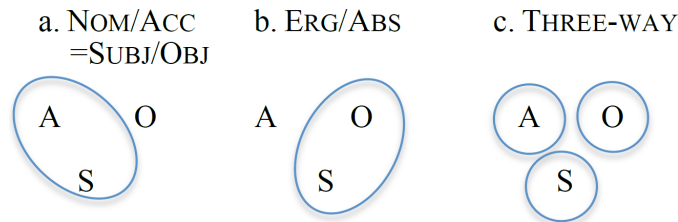
¹ They look at 179 languages, 41 of which have both case suppletion and more than two cases. Like Bobaljik’s (2012) generalization in (2), theirs also depends on the exclusion of some cases as instances of readjustment rather than suppletion proper: e.g. Nepali 1SG NOM *ma* ~ ERG *mai-le* ~ DAT *ma-laai*.

(9)



This is intriguing, but incomplete: nominative ~ accusative systems do not exhaust the range of possible case systems in the languages of the world.

(10)



(11) Shipibo (ergative ~ absolutive; Baker 2015: 8)

- a. Maria-nin-ra **ochiti** noko-ke.
 Maria-ERG-EVID dog.ABS find-PRF
 ‘Maria found the dog.’
- b. **Maria-ra** ka-ke.
 Maria.ABS-EVID go-PRF
 ‘Maria went.’

(12) Nez Perce (tripartite; Rude 1986: 126–127)

- a. Hi-páay-na **háama**.
 3SUBJ-arrive-ASP man.SNOM
 ‘The man arrived.’
- b. Háama-nm hi-néec-‘wi-ye *wewúkiye-ne*.
 man-ERG 3SUBJ-pOBJ-shoot-ASP elk-ACC
 ‘The man shot the elk (PL).’

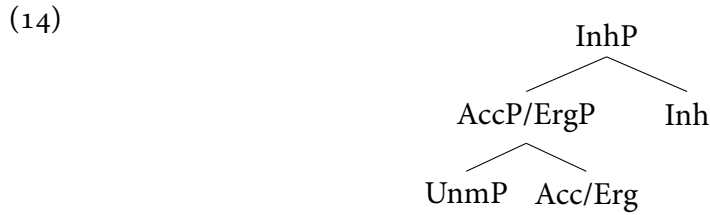
What about *ABA here?

Lezgian, 1SG	Georgian, 3SG	Wardaman, 3SG	Khinalug, 1SG
ABS zun	ABS is	ABS narnaj	ABS zə
ERG za	ERG man	ERG narnaj-(j)i	ERG yä
DAT zaz	DAT mas(a)	DAT gunga	DAT ás(ər)

Table 6: Patterns allowed in ergative systems (Smith *et al.* 2016: 15–16; Haspelmath 1993: 184; Merlan 1994: 112–114)

Given the order ABS–ERG–INH, it turns out that AAA, ABB, AAB, and possibly even ABC are all attested, but no instance of *ABA can be found.

- (13) **Smith *et al.*'s (2016) generalization:**
 The unmarked core case (nominative/absolutive) and an inherent case cannot use the same stem unless another core case (accusative/ergative) uses that same stem too.



	'boy', SG	'boy', PL
NOM	čhav-ó	čhav-é
ACC	čhav-és	čhav-én
GEN	čhav-és-koro... ²	čhav-én-goro...
DAT	čhav-és-ke	čhav-én-ge
INSTR	čhav-és-ar	čhav-én-car
LOC	čhav-és-te	čhav-én-de
ABL	čhav-és-tar	čhav-én-dar

Table 7: One Vlakh Romani paradigm (Friedman 1991: 57)

	'father', SG	'belt', SG	'sky', SG
ABS	gaga	čal	zaw
ERG	gaga-di	čal-i	zaw-u
GEN	gaga-di-n	čal-i-n	zaw-u-n
DAT	gaga-di-s	čal-i-s	zaw-u-s

Table 8: Three partial Agul paradigms (Klimov 1994: 148)

3 *ABA in systematic case syncretism

I propose that an analogous *ABA generalization can also be stated for syncretism.

- (15) a. No *systematic* syncretism can target both an unmarked core case (NOM/ABS) and an inherent case without also targeting another core case (ACC/ERG).
 b. Non-systematic syncretisms result either from phonological conflation or from purely accidental homonymy. In this latter case, they never involve multiple underlyingly distinct allomorphs.

² 'The genitive is followed by ellipsis to indicate the fact that there are also forms in *-i* and *-e* depending on [the gender, number, and case of] the head noun' (Friedman 1991: 57, fn2).

To test (15), I have put together the samples that were used in five sources:

- (i) Baerman *et al.* 2005;
- (ii) Plank 1991b;
- (iii) Caha 2009 and Caha 2010;
- (iv) the Surrey Syncretism Database.

This gives us 225 languages, most of which are irrelevant because their case-marking is either nonexistent or never syncretic. Once these are factored out, we are left with 67 languages, 26 of which are Indo-European.

The search turns up 6 surface counterexamples, of which:

- 3 are phonological confluents (Czech, Slovene, Lithuanian);
- 2 can be safely labeled as accidental homonymies (Polish, Georgian);
- 1 is potentially more problematic (Kashmiri).

	hand, SG	hand, PL	child, SG	'goose', SG
ABS	ath-i	ath-i	gobur	ənz
ERG	ath-an	ath-av	gobr-an	ənz-in
ABL	ath-i	ath-av	gobr-i	ənz(-i)
DAT	ath-as	ath-an	gobr-as	ənz-is

Table 9: Kashmiri (Kachru 1969: 112–114; SSD report)

But the data are dubious. The 'goose'-type paradigms are reported by Grierson³ and by Zaxarin and Edel'man,⁴ but not by any other source, including the grammars by Kachru (1969) and by Wali and Koul (1996), all native speakers of the language. Furthermore, Omkar Koul (p.c.) has informed me that the only ablative form he knows of for ənz 'goose' is the unproblematic ənz-i. This purported counterexample may thus result from misdescription or admixture of different dialects.

Here are some unproblematic examples.

³ George A. Grierson, *A manual of the Kashmiri language, comprising grammar, phrase-book, and vocabularies*. Oxford: Clarendon Press, 1911. Cited by the Surrey Syncretism Database report.

⁴ Boris A. Zaxarin and Džoj I. Edel'man, *Jazyk kašmiri*. Moscow: Nauka, 1971. Cited by the Surrey Syncretism Database report.

	‘window’, SG	‘teacher’, PL	‘100’
NOM	okn-o	učitel-ja	st-o
ACC	okn-o	učitel-ej	st-o
GEN	okn-a	učitel-ej	st-a
PREP	okn-e	učitel-jax	st-a
DAT	okn-u	učitel-am	st-a
INSTR	okn-om	učitel-am-i	st-a

Table 10: Fragments of three Russian paradigms (Caha 2009: 12)

	‘places’, DEF	‘places’, PROX	2PL
ABS	lekuak	lekuok	zuek
ERG	lekuek	lekuok	zuek
GEN	lekuen	lekuon	zuen

Table 11: Some partial plural paradigms from Basque (Hualde 2003: 173, 179)

	‘stone’	‘boomerang’	2SG
SNOM	bari	waŋal	inda
ACC	bari	waŋal	ina _n a
ERG	bari-ŋgu	waŋal-u	inda
INSTR	bari-ŋgu	waŋal-u	inundu

Table 12: Fragments of Margany paradigms (Breen 1981: 302ff)

To capture *ABA in syncretism within DM, it is best to reformulate the containment hierarchy not as a sequence of heads but in terms of containment between feature bundles.

- (16) a. NOM = [α]
 b. ACC = [α, β]
 c. DAT = [α, β, γ]

Let’s now focus on a fictitious ABA paradigm like (17).

- (17) NOM A
 ACC B
 DAT A

In order to realize the nominative, A must bear a proper or improper subset of the nominative’s features—that is, it must bear either only [α] or no case feature at all.

Given *Underspecification* ((4)), A is therefore a valid competitor also for spellout of ACC, given that NOM’s featural specification is itself a proper subset of ACC’s. The accusative

form, however, is not A but B, which means that B must be a better match than A according to the Elsewhere Principle. This leaves us only three possibilities.

(18) $A = [\emptyset], B = [\beta];$ $A = [\emptyset], B = [\alpha, \beta];$ $A = [\alpha], B = [\alpha, \beta].$

Under any of these scenarios, though, B is a better match than A also for spellout of dative, as it always matches at least one more DAT feature than A does. This rules (17) out.

The logic stays essentially the same if we replace Underspecification with Overspecification, as in Nanosyntax (Starke 2009; Caha 2009).

4 Implications for the theory of syncretism

The slogan for the theory of syncretism is:

- Systematic syncretisms in the domain of case are constrained by some version of the underspecification (or overspecification) logic.

This is not predicted by less restrictive approaches to syncretism which use unconstrained *impoverishment* operations (Distributed Morphology), *rules of referral* or content–form *property mappings* (various incarnations of Paradigm Function Morphology).

- (19) a. Unattested Impoverishment:
 $[\text{NOM}; \text{ACC}; \text{DAT}] \rightarrow [\text{NOM}] / [\text{PLURAL}] \text{ ___}$
 b. Unattested Rule of Referral (informal):
 In all inflections, the dative has the same form as the nominative.

The results here strengthen Caha’s (2009) original arguments against such approaches.

Why were such approaches proposed in the first place? *Metasyncretism*.

- (20) “Underspecification can predict syncretism created by a single VI’s features—but when the syncretism cuts across different VIs, underspecification becomes a description, not an explanation, of the pattern.” (Harley 2008: 257)

A tension I cannot yet resolve: if we want impoverishment or property mappings to model metasyncretism, we need to constrain them in a way that mimics underspecification.

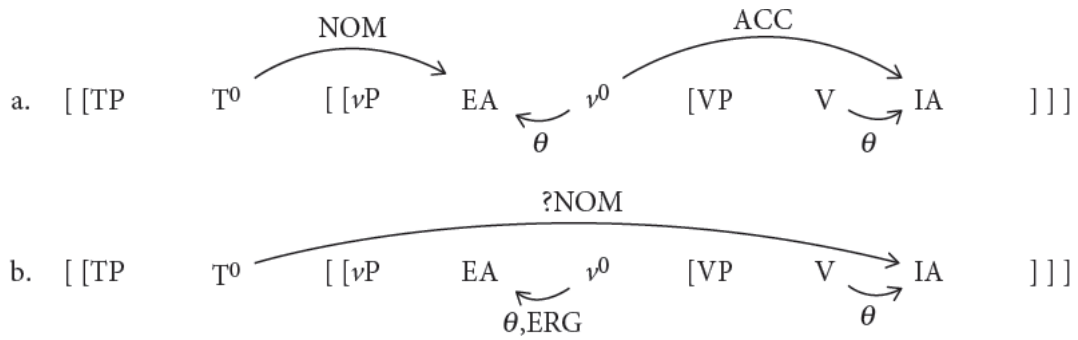
5 Ergative is not inherent

5.1 Evidence from *ABA

How to treat ergative ~ absolutive case alignments in terms of local feature valuation?

A popular response is to say that ergative is an inherent case which v^0 assigns, along with a ϑ -role, to its specifier (Woolford 1997, Legate 2008, *i.a.*):

(21)



The *ABA universals discussed so far argue against this view: they all converge on a case hierarchy where the ergative occupies the same ‘middle field’ as the accusative, instead of patterning with inherent cases.

(22) UNMARKED \subset ACC/ERG \subset INHERENT

The evidence for this is especially clear in tripartite systems, where ergative and accusative are side by side. Here we find that the ergative can syncretize with the unmarked case to the exclusion of accusative (table 13), and even share the same stem as the unmarked case while the accusative suppletes on its own (table 14).

	2DU	2SG
SNOM	nhuwalu	nhurra
ACC	nhuwalu-nha	nhurra-nha
ERG	nhuwalu-ru	nhurra

Table 13: Syncretism in Dhargari
(Austin 1981: 215)

	1SG	2SG
SNOM	ngaya	nyama
ACC	ngarr-	nga(a)nk-
ERG	ngaya-rni	nyama-rni

Table 14: Suppletion in Jingulu
(Pensalfini 2003: 149–152)

	‘man’, SG	‘field’, PL	2PL
SNOM	míiš	chíitr-a	tus
ACC	míiš	chíitr-a	tus-aám
ERG	míiš-a	chíitr-am	tus-ím

Table 15: Syncretisms in Palula
(from Liljegren 2016: 45,97,126)

	1SG	2SG
SNOM	yinga	nga
ACC	yinganha	nginha
ERG	atha	unta

Table 16: Suppletion in Alyawarra
(Yallop 1977: 94)

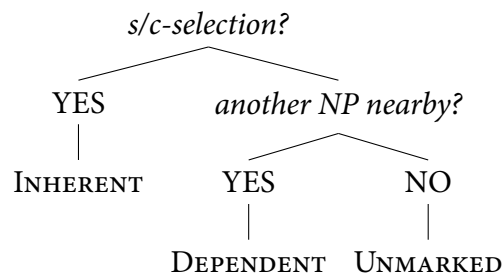
If the ergative were itself an inherent case, it should be the only one able to ‘skip’ the accusative as in tables 13–14 for either suppletion or syncretism. These facts thus offer a new kind of argument against ergative-as-inherent approaches.

5.2 The alternative: dependent case

- (23) Disjunctive case hierarchy (Marantz 1991; cf. also Yip *et al.* 1987)
 inherent → dependent → unmarked
- (24) a. If NP₁ c-commands NP₂, and neither is oblique, and both are contained in the same domain (clause? phase?):
 (i) Mark NP₁ [= ERG]
 (ii) Mark NP₂ [= ACC]
 b. Otherwise NP is UNMARKED [= NOM/ABS]
- (25) This gives us the following typology:
 a. if a construction only applies (24a-i), it will show ERG ~ ABS alignment;
 b. if it only applies (24a-ii), it will show NOM ~ ACC alignment;
 c. if it applies both (24a-i) and (24a-ii), it will show TRIPARTITE alignment;
 d. if it applies neither (24a-i) and (24a-ii), it will show NEUTRAL alignment.
- (26) Chukchi (Baker and Bobaljik forthcoming)
 a. *ətłəg-e qərir-ə-rkən-en ekək.*
 father-ERG seek-PRES-3SGA.3SGO son.ABS
 ‘The father is seeking the son.’
 b. *ətłəg-ən ine-lqərir-ə-rkən akka-gtə.*
 father-ABS APASS-SEEK-PRES.3SGS son-DAT
 ‘The father is searching for the son.’
- (27) Shipibo (Baker and Bobaljik forthcoming)
 a. *Maria-ra mawa-ke.*
 Maria-EVID die-PRF
 ‘Maria died.’
 b. *Nokon shino-n-ra ea mawa-xon-ke.*
 1SG.GEN monkey-ERG-EVID 1SG.ABS die-APPL-PRF
 ‘My monkey died on me.’

Not only do dependent-case theories categorize cases in the way that *ABA patterns require; Marantz’s disjunctive assignment hierarchy even looks identical to the containment hierarchy argued for so far. Why this should be so, however, is still a mystery.

(28)



6 Leaving genitives out of the hierarchy

(29) CLAUSEL UNMARKED \subset CLAUSEL DEPENDENT \subset INHERENT (cf. Smith *et al.* 2016)

(29) leaves out all the structural cases assigned in domains other than the clause—especially the genitive, analyzed by Marantz (1991) and Baker (2015) as the unmarked case at the NP/DP level.

This is arguably a good thing, given that the genitive seems to defy any generalization.

	German 3F.SG	Icelandic 1PL	Icelandic 1PL.HON
NOM	sie	við	vér
ACC	sie	okkur	oss
GEN	ihrer	okkar	vor
DAT	ihr	okkur	oss

Table 17: Non-linearizable syncretisms involving genitive

	Kryz (Authier 2009) 'tongue', SG 'house', SG		Agul (Klimov 1994) 'father', SG 'sky', SG	
ABS	mez	k'ul	gaga	zaw
ERG	miz-ir	k'ul-ci-r	gaga-di	zaw-u
GEN	miz	k'ul-ci	gaga-di-n	zaw-u-n
INSTR	miz-zina	k'ul-ci-zina	gaga-di-s	zaw-u-s

Table 18: Non-linearizable containment patterns involving genitive

Indeed, the genitive has always been one of the most problematic cases for the richer cartography proposed by Caha (2009):

(30) *Universal Case Contiguity* (Caha 2009: 10, 130)

- a. Systematic case syncretisms can only target contiguous regions of a linear case sequence invariant across languages.
- b. The case sequence: NOM – ACC – LOC₁ – GEN – LOC₂ – DAT – LOC₃ – INSTR

	NAME	‘geyser’, SG	‘old woman’, SG	1PL	2PL	2PL.HON
NOM	Hild-ur	hver	kerling	við	þið	þér
ACC	Hild-i	hver	kerling-u	okk-ur	ykk-ur	yð-ur
GEN	Hild-ar	hver-s	kerling-ar	okk-ar	ykk-ar	yð-ar
DAT	Hild-i	hver	kerling-u	okk-ur	ykk-ur	yð-ur

Table 19: Six Icelandic paradigms (cf. Harðarson 2016)

	‘horn’	1SG	2SG	REFL
NOM	cornū	ego	tū	—
ACC	cornū	mē / mēmē / mēd	tē / tētē / tēd	sē / sēsē / sēd
GEN	cornūs	meī / mis	tuī / tis	suī
DAT	cornū	mihi / mē	tibi	sibi
INSTR	cornū	mē / mēmē / mēd	tē / tētē / tēd	sē / sēsē / sēd

Table 20: Four Latin paradigms

Starke (2017) has recently tried to salvage Caha’s (2009) hierarchy by enriching it further:

$$(31) \quad \text{NOM} \subset \text{ACC}_1 \subset \text{DAT}_1 \subset \text{GEN} \subset \text{ACC}_2 \subset \text{DAT}_2 \dots \quad (\text{disregarding locatives})$$

This fixes the problems at the cost of overgenerating: As far as I can tell, if a language could just use DAT_1 and ACC_2 , it could then feature the impossible syncretism $\text{NOM}=\text{DAT} \neq \text{ACC}$.

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