

Pronominal Suppletion: Case and Number

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1 Outline

Using suppletion as a diagnostic for structure (Bobaljik 2012), we present the results of a survey into pronominal suppletion patterns found with case and number, and show that there is evidence for each category being internally complex.

The generalizations that we present are as follows:

- Once a pronoun has shown suppletion for the dependent case, the pronominal base does not revert back to the unmarked base in the oblique form.
- Pronominal suppletion for number shows either; (i) plural and dual patterning together; or (ii) plural and dual each having distinct suppletive bases.
- Pronouns never have singular and dual sharing a non-suppletive base, with exclusively the plural base being suppletive.

In accordance with Bobaljik (2012), we see that ABA patterns of suppletion are universally disallowed for these two categories.

2 Suppletion for complex categories

Bobaljik (2012) conducts a wide cross-linguistic survey into adjectival suppletion in the context of comparative and superlative morphology. His findings show that there are the

following attested patterns:

- AAA: the positive, comparative and superlative all share the same base.
- ABB: the comparative and superlative share a suppletive base distinct from the positive.
- ABC: the comparative and superlative are both suppletive with respect to the positive and with respect to each other.

(1)		POS	COMP	SPRL	Pattern
a.	English	smart	smart-er	smart-est	AAA
b.	English	good	bett-er	b-est	ABB
c.	Estonian	hea	pare-m	par-im	ABB
d.	Latin	bon-us	mel-ior	opt-imus	ABC
e.	Welsh	da	gwell	gor-au	ABC

Strikingly, there are no clear ABA or AAB instances (see Bobaljik 2012 for qualifications). ABA would hypothetically be *good – better – goodest*. AAB would be *good – gooder – best*.

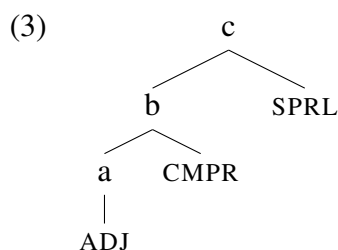
⇔ Both ABA and AAB patterns are *a priori* conceivable, but the fact that they are never attested suggests that the grammar simply is unable to generate them.

Bobaljik proposes the containment hypothesis to capture the data:

(2) The Containment Hypothesis

The representation of the superlative properly contains that of the comparative.

Examples of transparent morphological containment: Ultan (1972), Bobaljik (2012).



- (4) a. GOOD → be(tt)- / __] CMPR
b. GOOD → good

By the Elsewhere Condition (Kiparsky 1973):

A rule (e.g., suppletive v.i.) that applies to the root in the context of the comparative will necessarily also apply in the superlative [=ABB] (unless blocked by a more specific rule [=ABC])

⇒ Conclusion:

Suppletion can be used as a diagnostic of structure.

(The above excludes *ABA; an additional assumption is needed to exclude AAB. This additional assumption has the effect that:

Suppletion must happen in the comparative for it to be possible in the superlative.)

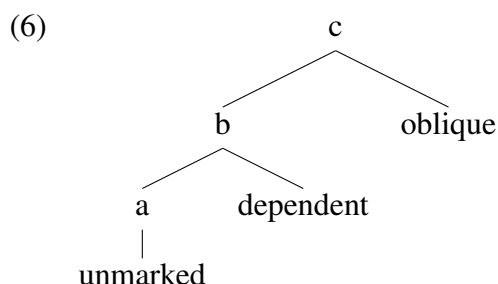
3 Case suppletion

Recent work has suggested that morphological case is not a privative notion of [+nominative] features, but rather the cases themselves are internally complex.

Caha 2009 shows that the instrumental case in Colloquial Czech transparently contains the accusative case:

(5)

	‘man’	‘chicken’	‘eye’
NOM	muž-i	kuřat-a	oč-i
ACC	muž-E	kuřat-A	oč-I
INST	muž-E-ma	kuřat-A-ma	oč-I-ma



If cases are complex entities, then we should expect that this is reflected in the same suppletion patterns that are seen in comparative/superlative suppletion.

That is, we make the following predictions:

- AAA, ABB, ABC are all possible patterns of suppletion.
- ABA should not be a possible pattern.

- AAB *potentially* is a possible pattern depending on the type of complexity, see section 3.2.

These predictions are by and large confirmed in our survey:

(7)	Pattern	Prediction	Attested?	Representative Languages
	AAA	✓	✓	Lezgian, W. Greenlandic, etc.
	AAB	✓	✓	Krongo, Hunzib, Wardaman
	ABB	✓	✓	Indo-European, Evenki, Xakass, Chuvash, Itelmen
	ABC	✓	?	Murle?
	ABA	✗	✗	n/a

ABA is unattested as expected. AAB *is* found, see section 3.2.

3.1 Attested patterns of suppletion

3.1.1 AAA patterns

- Lezgian

(8)	Form	Absolutive	Ergative	Dative	Adessive	Inessive
	1sg	zun	za	zaz	zaw	za
	2sg	wun	wuna	waz	waw	wa
	1pl	čun	čna	čaz	čaw	ča

- West Greenlandic

(9)	Form	Absolutive	Instrumental	Allative	Locative	Ablative
	1sg	uanga	uannik	uannut	uanni	uannit
	1pl	uagut	uatsinnik	uatsinnut	uatsinni	uatsinnit

3.1.2 ABB patterns

- Armenian

(10)	Form	Nominative	Dative	Ablative	Locative	Instrumental
	1sg	es	inj	inj(a)nic	inj(a)num	inj(a)nov
	2sg	du	k'ez	k'ez(a)nic	k'ez(a)num	kez(a)nov
	2pl	duk'	jez	jez(a)nic	jez(a)num	jez(a)nov

- Icelandic

(11)	Form	Nominative	Accusative	Dative
	1sg	ég	mig	mér

3.1.3 ABC patterns

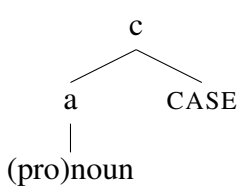
A possible ABC pattern comes from Murle:

(12)	Form	Nomative	Accusative	Dative
	1sg	naana	aneeta	ɲaatan
	2sg	niina	ineeta	ɲaatun
	3sg	niini	nɔnnɔ	ɲaatin
	1pl	naaga	ageeta	ɲaatinaaɲ
	2pl	niiga	igeeta	ɲaatinooɲ
	3pl	niigi	ɲɔɔgo	ɲaatineeɲ

3.2 What about AAB?

If case markedness is structural nesting as in (6), then AAB should be excluded.

If case markedness is featural nesting, then AAB could be possible (cf. Wiese 2005, Bobaljik 2012 on German participles).

- (13) a.  b. CASE
- K₁ K₂ K₃ = oblique
K₁ K₂ = dependent
K₁ = unmarked (nominative)

- German

(14)

	Nominative	Accusative	Dative
3.sg.m	er	ihn	ihm
3.sg.f	sie	sie	ihr
3.pl	sie	sie	ihnen

- Krongo

(15)

Form	Subject	Object	Dative	Ablative	Locative
1sg	àʔàŋ	àʔàŋ	àʔàŋ	nkàtí	kàtí
2sg	ùʔùŋ	ùʔùŋ	ùʔùŋ	nkòtú	kòtú
1ex	óow	óow	óow	nkòtíg	kòtíg

For most of the AAB cases that we find, AA is produced by complete syncretism between the first two cases, since we don't see a separate case marker on the forms. For these, it is not clear that they should be seen as AAB, but rather AB patterns, and pose no problems.

However, Wardaman has an AAB pattern, but has an ergative case marker *-yi/ji* distinguishing it from the absolutive, showing that the first two cases are not syncretic.

(16)

Form	Absolutive	Ergative	Dative/oblique
3sg	narnaj	narnaj-(j)i	gunga
3pl	narnaj-bulu	narnaj-bulu-yi	wurrugu

⇒ The Wardman facts suggest that CASE is a single node, with featural containment.

If we assume that case containment is containment of features then we can generate AAB patterns whilst still ruling out ABA patterns.

Therefore, we propose that case features are complex, and that cases are built on top of one another.

⇒ Unmarked cases are the most simple.

⇒ Dependent cases contain the features for unmarked case also.

⇒ Oblique cases contain the features for dependent cases and unmarked cases.

Consider the following analysis of Wardaman:

- (17) a. Absolutive = $[K_1]$
b. Ergative = $[K_1, K_2]$
c. Dative = $[K_1, K_2, K_3]$
- (18) a. $\begin{bmatrix} \text{-SPEAKER, -HEARER} \\ K_1, K_2, K_3 \\ \text{-SINGULAR} \end{bmatrix} \rightarrow \text{wurrugu}$
b. $\begin{bmatrix} \text{-SPEAKER, -HEARER} \\ K_1, K_2, K_3 \end{bmatrix} \rightarrow \text{gunga}$
c. $[K_1, K_2] \rightarrow \text{-yi/-ji}$
d. $[\text{-SINGULAR}] \rightarrow \text{-bulu}$
e. $[\text{-SPEAKER, -HEARER}] \rightarrow \text{narnaj (elsewhere)}$

3.3 *ABA

We do not find any convincing cases of ABA patterns in case. A potential example in Archi (2pl):

(19)	Archi	Absolutive	Ergative	Dative	Oblique
	‘who’	k ^w i	hi-	ha-	—
	1SG	zon	za-ri	GM-ez	za-
	1PL.EX	nen	nen	GM-el	la-
	1PL.IN	nen	nen+GM	GM-el-a-GM-u	la-
	2SG	un	wit	wa-s	wa-
	2PL	ž ^w en	ž ^w en	wiš	ž ^w a-

- (20) AAB examples (like 1PL.EX) involve complete syncretism = neutralization = impoverishment
- (21) DATIVE (and GENITIVE) pronouns have a very different structure from other cases (GM)+person element

4 Number suppletion

Number is another category that has been shown to be complex, and not composed of privative features.

In order to investigate suppletion patterns in number, we need to look at number systems beyond singular – plural, and include a dual.

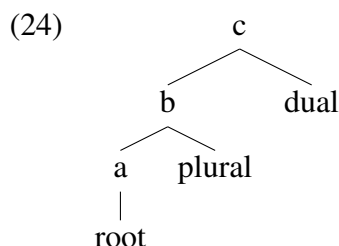
That number might involve a containment configuration is shown by languages where the dual form transparently contains the plural form, such as in Manam below:

- (22) áine **ɲára** áine **ɲára-di** áine **ɲara-dí-a-ru**
 woman that-SG woman that-PL woman-that-PL-LINKER-DL
 ‘that woman’ ‘those women’ ‘those two women’

Furthermore, similar hierarchical statements can be made about number as can be made about case and comparative suppletion:

- (23) No language has a trial number unless it has a dual. **No language has a dual unless it has a plural.** (Universal 34, Greenberg 1963, Corbett 2000)

Based on analogy with adjectival suppletion and case suppletion, we might suggest that number has a similar containment configuration:¹



Were number to be contained in this way, we make the following predictions regarding number. In singular – plural – dual triples:

- ⇒ AAA, ABB and ABC patterns are all allowed and should be seen.
- ⇒ AAB and ABA patterns should not be attested.

¹Note that the containment need not be structural, but the same logic applies to feature containment. As long as the feature that expresses the dual always properly contains the feature that properly contains the plural, then the same facts holds.

Again, these are by and large borne out by the data:

(25)	Pattern	Prediction	Attested?	Languages
	AAA	✓	✓	Mapuche, Dumi
	AAB	✓ ²	✗	n/a
	ABB	✓	✓	Kayardild, Kham, Jingulu
	ABC	✓	✓	Yimas
	ABA	✗	✗	n/a

4.1 Attested patterns of Suppletion

4.1.1 AAA Patterns

- Mapuche

(26)		SINGULAR	PLURAL	DUAL
	1st	iñché	iñchiñ	iñchiu
	2nd	eymi	eymün	eymu
	3rd	fey	fey-engún	fey-engu

- Dumi

(27)		SINGULAR	PLURAL	DUAL
	1excl	aŋ	antsi	aŋki
	2nd	ani	antsi	ani

4.1.2 ABB Patterns

- Kayardild

(28)		SINGULAR	PLURAL	DUAL
	2nd	nyinka	kilda	kirra
	3rd	niya	bilda	birra

²Recall from section 3.2 that AAB is *a priori* expected to be possible. The additional step of making the containment structures structural in Bobaljik (2012) rules out AAB patterns. We will see below that this turns out to be correct for number.

- Kham

(29)		SINGULAR	PLURAL	DUAL
	1st	ŋa:	ge:	gi-n
	2nd	ñi:	je:	ji-n
	3rd	no:	no:-rə	no:-ni

4.1.3 ABC Patterns

- Yimas

(30)		SINGULAR	PLURAL	DUAL
	1st	ama	ipa	kapa
	2nd	mi	ipwa	kapwa

4.2 Unattested patterns of suppletion

4.2.1 ABA

We do not find any instances of ABA patterns in number in pronouns. When the plural form is suppletive, so too is the dual form.

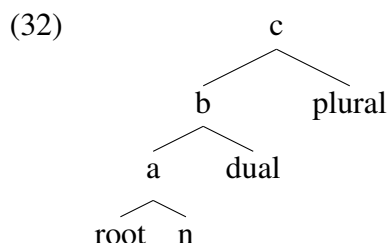
ABA does seem to be found in lexical nouns, however.³

(31)	Language	Singular	Dual	Plural	Gloss
	Hopi	wùuti	wùutit	momoyam	‘woman’
	Lavukaleve	vo’vou	vo’voul	tulav	‘boy’
	Yimas	panmal	panmalc-rm	pay-um	‘man’

⇒ To the extent that these findings can be generalized, they show a surprising asymmetry between pronouns and lexical nouns.

Pronouns seem to have the containment structure as in (24) where the plural lies outside the dual, which reflects general markedness relations in language. However, suppletion patterns in lexical nouns point towards a structure for lexical nouns where the dual is beneath the plural:

³Note that we are unable to investigate case suppletion in lexical nouns, since lexical nouns never supplete for case (see Moskal to appear for further discussion).



At least in the Hopi case, this reversal in structure is transparently reflected, in that plural nouns are sometimes built with the exponent of dual in them:

(33)

	Singular	Dual	Plural
‘person’	sino	sino-t	sino-m
‘horse’	kawayo	kawayo-t	kawayo-m
‘donkey’	mooro	mooro-t	moo-moro-t
‘child’	tsay	tsaayo-m	tsaa-tsayo-m
‘woman’	wùuti	wùuti-t	momoyam

As can be seen from the forms for ‘child.PL’ and ‘donkey.PL’, the plural is (sometimes) formed through partial reduplication of the root. Crucially however, the dual suffix is still present in the plural form but in the dual form, there is no suggestion that the plural is there.

5 Conclusions

We have shown that there are limitations to suppletion found in both case and number.

- ⇒ ABA patterns are found in neither case or number suppletion.
- ⇒ Case suppletion shows that case features progressively get more complex. More marked cases contain less marked cases (*cf.* Caha 2009).
- ⇒ Case containment is best represented as featural containment, not structural.
- ⇒ Number suppletion appears to be best represented as structural containment, with the caveat that the structure is exceptionally able to show a markedness reversal with respect to lexical nouns, where the dual apparently is contained within number, but not vice versa.

References

- Bobaljik, Jonathan D. (2012) *Universals in Comparative Morphology*. Cambridge, MA: MIT Press.
- Caha, Pavel (2009) *The nanosyntax of case*. Ph.D. thesis, University of Tromsø.
- Corbett, Greville (2000) *Number*. Cambridge: Cambridge University Press.
- Greenberg, Joseph H. (1963) Some universals of grammar with particular reference to the order of meaningful elements. In *Universals of language*, Joseph H. Greenberg, ed., Cambridge, MA: MIT Press, 73–113.
- Kiparsky, Paul (1973) "Elsewhere" in phonology. In *A Festschrift for Morris Halle*, New York: Holt, Reinhart and Winston, 93–106.
- Moskal, Beata (to appear) Evidence for limits on allomorphy: A case-study in nominal suppletion. *Linguistic Inquiry*.
- Ulan, Russel (1972) Some features of basic comparative constructions. *Working papers on Language Universals* 9: 117–162.