

Strong Case Containment is too strong: two arguments from defaults

Christos Christopoulos (UConn/Harvard University) & Stanislao Zompì (MIT)

Recent work has drawn conclusions about the feature composition of grammatical cases based on cross-linguistic patterns of syncretism. Surveys of case-based suppletion (Moskal, 2015; McFadden, 2018; Smith *et al.*, 2018) and case syncretism (Caha, 2009; Zompì, 2017) show that both these phenomena universally obey *ABA. All the works cited explain *ABA via Strong Case Containment (SCC), such that each oblique case properly contains the accusative, which in turn contains the nominative, as in (1).

$$(1) \quad \text{NOM}=\{F_1\} \qquad \text{ACC}=\{F_1, F_2\} \qquad \text{OBL}=\{F_1, F_2, F_3\}$$

Our claim is that SCC should be weakened to Weak Case Containment (WCC) (2), such that ACC remains contained within OBL, but NOM is not contained within ACC. We show that just like SCC, WCC can derive *ABA. However, we present two arguments that WCC should be preferred over SCC. Specifically, we argue that SCC, but not WCC, makes predictions about the choice of default (or elsewhere) allomorphs as well as about the form of Default Case, both of which turn out to be incorrect.

$$(2) \quad \text{NOM}=\{F_0, F_1\} \qquad \text{ACC}=\{F_1, F_2\} \qquad \text{OBL}=\{F_1, F_2, F_3\}$$

SCC, WCC & *ABA. SCC allows us to derive *ABA in a framework like DM, where syntactic terminals are realized by potentially underspecified exponents, whose competition is regulated by the Elsewhere Principle. Absent a dedicated exponent for the OBL context, the system will resort to the “closest match” available. Given SCC in (3), the “closest match” for the oblique’s $\{F_1, F_2, F_3\}$ will always be the exponent that also best matches the accusative’s $\{F_1, F_2\}$, thus deriving *ABA. The same result, however, can also be achieved without proper containment of NOM within ACC. Given WCC in (4), the “closest match” for the oblique’s $\{F_1, F_2, F_3\}$ will also always be the exponent that also best matches the accusative’s $\{F_1, F_2\}$. Thus, either SCC or WCC can be paired with the Elsewhere Principle to derive *ABA in Case syncretisms.

$$(3) \quad \text{a. } \{F_1\} \leftrightarrow / \alpha / \qquad \text{b. } \{F_1, F_2\} \leftrightarrow / \beta / \qquad \text{c. } \{F_1, F_2, F_3\} \leftrightarrow ?$$

$$(4) \quad \text{a. } \{F_0, F_1\} \leftrightarrow / \alpha / \qquad \text{b. } \{F_1, F_2\} \leftrightarrow / \beta / \qquad \text{c. } \{F_1, F_2, F_3\} \leftrightarrow ?$$

SCC, WCC & default forms. Strong and Weak Case Containment impose different constraints on the description of case-conditioned allomorphy patterns like the one from Domari in Table 1. In an SCC approach, because all features of NOM (F_1) are also contained in all other cases, the only way to restrict an allomorph like *h* to only nominative environments is by treating it as a ‘default’ or ‘elsewhere’ form, after positively specifying the other allomorph *ra* for ACC, as in (5). By contrast, in a WCC approach, the fact that NOM is not properly contained in any other case makes it possible to refer exclusively to it, and thus to treat the allomorph with the broadest distribution (*ra*) as the default, as shown in (6).

	DISTAL				PROXIMAL			
	M.SG	M.PL	F.SG	F.PL	M.SG	M.PL	F.SG	F.PL
NOM	u-h-u	e-h-e	i-h-i	e-h-e	a-h-a	e-h-e	i-h-i	e-h-e
ACC	ō-ra-s	ō-ra-n	ō-ra	ō-ra-n	e-ra-s	e-ra-n	e-ra	e-ra-n
DAT	ō-ra-s-ta	ō-ra-n-ta	ō-ra-ta	ō-ra-n-ta	e-ra-s-ta	e-ra-n-ta	e-ra-ta	e-ra-n-ta

Table 1: Domari demonstrative pronoun (Matras, 2012: p. 219)

$$(5) \quad \text{a. } \text{DEM} \leftrightarrow h \text{ (default/elsewhere)} \\ \text{b. } \text{DEM} \leftrightarrow ra / \text{ACC}$$

$$(6) \quad \text{a. } \text{DEM} \leftrightarrow h / \text{NOM} \\ \text{b. } \text{DEM} \leftrightarrow ra \text{ (default/elsewhere)}$$

We argue that some forms occurring only in NOM cannot be taken to be default forms, if we are to avoid describing patterns via reference to multiple disjoint sets of morphosyntactic features. We report on a survey of (pro-)nominal Indo-European paradigms featuring stem allomorphs that only appear in NOM contexts, where, in addition to paradigms such as the one in Table 1, we also find paradigms such as the one in Table

2. Such paradigms are problematic for SCC, because, if we are to maintain that the stem allomorph that only occurs in NOM (*s-*) is the default allomorph, we would have to specify the other allomorph (*ð-*) for a disjoint set of features, as in (7). By contrast, if we adopt WCC, such paradigms can be described without reference to disjoint sets of features, simply by positively specifying the allomorph that only occurs in NOM, as in (8).

	DISTAL				PROXIMAL			
	M.SG	M.PL	F.SG	F.PL	M.SG	M.PL	F.SG	F.PL
NOM	s-e	ð-ā	s-ēo	ð-ā	ð-es	ð-ās	ð-ēos	ð-ās
ACC	ð-one	ð-ā	ð-ā	ð-ā	ð-isne	ð-ās	ð-ās	ð-ās
DAT	ð-āem	ð-āem	ð-āere	ð-āem	ð-issum	ð-issum	ðisse	ð-issum

Table 2: Old English demonstrative pronoun (Hogg & Fulk, 2011: pp. 192,195)

- (7) a. DEM \leftrightarrow *s* (default/elsewhere) (8) a. DEM \leftrightarrow *s* / **NOM** \wedge **SG** \wedge **DIST**
b. DEM \leftrightarrow *ð* / **ACC** \vee **PL** \vee **PROX** b. DEM \leftrightarrow *ð* (default/elsewhere)

McFadden (2018) suggests an alternative in keeping with SCC, namely, that nondefault stem allomorphs in such paradigms are not “sensitive to the presence of particular heads, but to the presence of *any* marked value,” thus avoiding the need for disjunctive environments like (7b). The existence of pronominal paradigms such as the above, however, argues directly against this markedness-based solution, because, at the same time as the relevant stem allomorphy is sensitive to Case, Number and Deixis features, it is not sensitive to any Gender feature. The markedness-based solution would thus lead us to the worrying conclusion that both MASC and FEM are unmarked morphosyntactic features. Paradigms where either Deixis features alone or both Gender and Deixis features are similarly ignored by stem allomorphy are also discussed. We conclude that WCC is preferable to SCC, since the former does not require reference to disjoint sets of morphosyntactic features in the descriptions of patterns of stem allomorphy, while the latter systematically does so.

SCC, WCC and Default Case. Default Case (DEF) is known as the morphological case marking on a nominal that is not in a position where it can be assigned case syntactically (Emonds, 1986; Schütze, 2001; McFadden, 2007; Parrott, 2009). While in languages like German, Russian and Greek DEF is syncretic with NOM to the exclusion of ACC, in languages like English, Danish and Irish it is syncretic with ACC to the exclusion of NOM. Assuming the set of features involved in DEF to be empty, DEF should be properly contained within all other cases. Just as it predicts that NOM will never be syncretic with OBL to the exclusion of ACC (*ABA), SCC in (9) also wrongly predicts that DEF will never be syncretic with ACC to the exclusion of NOM. (This is also the prediction of approaches that take NOM to have no features, i.e. whereby NOM=DEF.) By contrast, WCC in (10) correctly predicts that it should be possible for DEF to be syncretic with ACC to the exclusion of NOM, just as it should be possible for it to be syncretic with NOM to the exclusion of ACC.

- (9) DEF={ \emptyset } NOM={ F_1 } ACC={ F_1, F_2 } OBL={ F_1, F_2, F_3 }
(10) DEF={ \emptyset } NOM={ F_0, F_1 } ACC={ F_1, F_2 } OBL={ F_1, F_2, F_3 }

We show that these results hold even under richer alternative assumptions about the featural composition of DEF, e.g. under the hypothesis that it might just share F_1 with all other cases.

Conclusion. Our investigations of default stem allomorphs and Default Case patterns converge in indicating that, while SCC may derive *ABA, it is too strong an assumption about the feature decomposition of Cases. The proposed alternative feature decomposition, i.e. WCC, is permissive enough to account for the attested patterns of both default forms and Default Case, at the same time as it still allows us to derive *ABA.

References: Caha 2009. *The nanosyntax of case*. PhD diss. Tromsø • McFadden 2018. *ABA in stem-allomorphy and the emptiness of the nominative. *Glossa* • Moskal 2015. *Domains on the border*. PhD diss. UConn • Schütze 2001. On the nature of Default Case. *Syntax* • Smith *et al.* 2018. Case and number supplementation in pronouns. *NLLT* • Zompì 2017. *Case decomposition meets dependent-case theories*. MA thesis. Pisa.