Evidence for Case Containment from the Interaction of Case Morphology and Possessive Marking in Balkar

Colin P. B. Davis

1. Introduction

A number of recent findings in morpho-syntactic research indicate that case markers frequently have a richer internal structure than their surface appearance typically suggests. Many works in this vein argue, based on cross-linguistic facts about phenomena like suppletion and syncretism, that case features are organized into an implicational containment hierarchy. See for instance Caha (2009, 2013), Moskal (2015a), Moskal & Smith (2016), Zompì (2017), Smith et al. (2019), and Davis (2021). Though differing in various details, these works all argue for (at least) the case containment relationships in (1):[1]

(1) a. *Nominative*
[N NOM]

b. *Accusative*
[[N NOM] ACC]

c. *Oblique*
[[[N NOM] ACC] OBL]

For this paper, what is most important is the hypothesis that oblique cases like locative, ablative, and so on, contain accusative case (1c). Smith et al. (2019) observe that in two languages, Khanty and Kalderaš Romani, case morphology is sometimes surface-evidently complex in the way that this hypothesis leads us to expect. However, case marking in most languages is not complex in this way, and therefore most arguments for case containment are less direct. I argue that Balkar (Turkic) shows relatively clear evidence for case containment, and in particular, for the containment of accusative case by oblique cases.

Recent research in morpho-syntax argues, based on evidence from various domains, for a generalization like that in (2). See for instance Bobaljik (2012), Moskal (2015a, 2018), and Smith et al. (2019):

(2) *Morphological rules in implicational hierarchies*
If an element α undergoes a morphological rule in the context of a syntactic feature/category β, then α will also undergo that rule in more complex contexts that entail the presence of β.

Importantly, when we combine this generalization with the hypothesis that oblique cases contain accusative case, we make the additional prediction in (3):

(3) *Morphological rules in accusative and oblique cases*
Any morphological rule triggered by accusative case should also be triggered by oblique cases.

Smith et al. (2019) argue based on a cross-linguistic study of pronominal suppletion that this prediction (among other related ones) is correct. For analogous findings about cross-linguistic case syncretism, see Caha (2009). I argue that Balkar provides further verification of this prediction. Specifically, here we will

* Colin P. B. Davis, University of Southern California, colind@alum.mit.edu.
The Balkar facts reported here were gathered through fieldwork elicitation with about ten native Balkar speakers in 2019, in the village Verkhnyaya Balkaria in the Kabardino-Balkarian Republic, Russia. Thanks to Tanya Bondarenko, Lena Delikanova, Mitya Privoznov, Sergei Tatevosov, Beata Moskal, the MorPhun morphology group at MIT, and the Moscow State University fieldwork group which I joined in order to participate in this fieldwork. This research was supported by the MIT Ken Hale fund, and the Russian Foundation for Basic Research (grant No. 19-012-00627 A).
[1] Several of the works cited here discuss case containment in terms of the categories of the *dependent case* theory of Marantz (1991). Since this theory is not relevant for this paper, here I maintain more neutral terminology.

see that Balkar has an alternation in certain possessed NPs that is endemic only to accusative and oblique cases, just as expected given the considerations described above.

2. The Balkar facts

Balkar has not been discussed in much (English language) linguistic literature, though it is the topic of some work in syntax and semantics (Lyutikova et al. 2006, Bondarenko & Davis To appear). In this language, accusative and genitive case are typically both expressed as *-nI*, as shown respectively by (4) and (5) below. Like most Turkic languages, Balkar has vowel harmony for frontness/backness and roundedness. In this paper we will see /I/, a harmonizing high vowel, and /A/, a harmonizing low vowel.

(4) *Typical accusative -nI*

a. men bala-nɨ köröme
1SG child-ACC see
'I see a child'

b. kerim fatima-nɨ kördü
kerim fatima-ACC saw
'Kerim saw Fatima'

c. kerim ali-nɨ kördü
kerim ali-ACC saw
'Kerim saw Ali'

(5) *Genitive -nI*

a. bala-nɨ illew-u qanʁa-da turadɨ
child-GEN toy-3POSS table-LOC stands
'A/the child's toy is (stands) on the table'

b. siz-ni illew-ügüz qanʁa-da turadɨ
2PL-GEN toy-2PL.POSS table-LOC stands
'Your (pl) toy is (stands) on the table'

When a Balkar NP is possessed, it carries a suffix agreeing with the ϕ-features of its possessor, as (6) shows. We see here that accusative case is expressed as *-n* rather than *-nI* when adjacent to the 3rd person possessive suffix *-(s)I*, which I gloss as "3POSS". (This suffix includes initial /s/ when vowel-adjacent.)

(6) *Accusative allomorph -n with 3rd person possessive suffix*

a. men fatima-nɨ sabij-i-n/*ni köröme
1SG fatima-GEN child-3POSS-ACC see
'I see Fatima's child'

b. kerim kesine qonšu-su-n urdu
kerim self's neighbor-3POSS-ACC hit
'Kerim hit his neighbor'

The accusative allomorph *-n* is not permitted in non-possessed forms, as (7) shows:

(7) *No accusative allomorphy in un-possessed NPs*

a. men qonšu-nu/*n körgemme
1SG neighbor-ACC saw
'I saw a neighbor'

b. men tereze-ni/*n körgemme
1SG window-ACC saw
'I saw a window'

This accusative allomorph is also impossible with possessive suffixes other than the 3rd person one, as we see in (8) below. Note that while the 3POSS morpheme *-(s)I* ends in a vowel, the possessive suffixes for first and second persons end in consonants (/-(I)m, -(I)bIz, -(I)ŋ, -(I)gIz/), as (8) shows. Since Balkar has a maximum syllable size of CVC, it is conceivable that the accusative allomorph *-n* doesn't occur with other possessvie markers because it would create an illegal CC coda. In (8) use of an epenthetic vowel to break up the potential cluster was attempted, though this was not accepted. Since Balkar sometimes shows place assimilation in nasal consonants, this was also attempted, but ultimately rejected. Speakers offered no way of improving these examples, other than to use the usual accusative *-nI*. In sum, while it remains possible that phonology is responsible for restricting the distribution of the *-n* accusative, for the purposes of this paper there is no harm in assuming that only 3POSS triggers this accusative variant.

(8) *No accusative allomorphy in other possessive contexts*

a. * kerim meni bala-m-(ɨ)n/m / sabij-im-(i)n/m köredi
kerim 1SG.GEN child-1SG.POSS-ACC / child-1SG.POSS-ACC sees
'Kerim sees my child.'

b. * kerim biz-ni bala-biz-(ɨ)n / sabij-ibiz-(i)n köredi
kerim 1PL-GEN child-1PL.POSS-ACC / child-1PL.POSS-ACC sees
'Kerim sees our child.'

c. * kerim seni bala-ŋ-(ɨ)n/ŋ / sabij-iŋ-(i)n/ŋ köredi
kerim 2SG.GEN child-2SG.POSS-ACC / child-2SG.POSS-ACC sees
'Kerim sees your (sg) child.'

d. * kerim siz-ni bala-ʁɨz-(ɨ)n / sabij-igiz-(i)n köredi
kerim 2PL-GEN child-2PL.POSS-ACC / child-2PL.POSS-ACC sees
'Kerim sees your (pl) child.'

Due to space limitations, (8) above only shows ungrammatical examples. The grammatical versions of these examples replace *-n* with *-nI*, whose initial /n/ assimilates with the place of articulation of the preceding possessive suffix. This yields accusative *-mI* in the 1st person singular, and *-ŋi* in the second person singular. Since 1st and 2nd plural possessive suffixes end in the alveolar /z/, the accusative remains *-nI* when these suffixes are combined.

There is also evidence that this accusative alternation is morpho-syntactically conditioned, and not caused by a more general (morpho-)phonological process. Though genitive case is usually syncretic with accusative in Balkar, importantly, genitive case remains *-nI* even when adjacent to the 3POSS suffix (9):

(9) *3POSS does not trigger allomorphy for genitive case*

a. [fatima-nɨ bala-sɨ-nɨ/*n] kištig-i
fatima-GEN child-3POSS-GEN cat-3POSS
'Fatima's child's cat'

b. fatima kerim-ni qonšu-su-nu/*n xatasɨndan üj-de qalʁandɨ
fatima kerim-GEN neighbor-3POSS-GEN because home-LOC stayed
'Fatima stayed home because of Kerim's neighbor'

c. anɨ qonšu-su-nu kištig-i čičʁan tutdu
3SG.GEN neighbor-3POSS-GEN cat-3POSS mouse caught
'His/her neighbor's cat caught a mouse'

This fact shows that accusative and genitive case are distinct entities in Balkar morpho-syntax, despite their usual syncretism, and also shows that mere surface phonology is not relevant for the puzzle at hand.

2.1. An analogous process in locative and ablative cases

A process interestingly similar to that just shown for accusative case is also evident in the locative and ablative cases. Usually, locative is *-dA* (10) and ablative is *-dAn* (11):

(10) *Locative case*

a. kitab šindig-de turadɨ
book chair-LOC stands
'A book is on a chair'

b. tepse-de küsün turadɨ
table-LOC vase stands
'A vase is on a table'

(11) *Ablative case*

a. fatima-ʁa pismo ustaz-dan keldi
fatima-DAT letter teacher-ABL came
'A letter came to Fatima from the teacher'

b. fatima-ʁa pismo bala-dan keldi
fatima-DAT letter child-ABL came
'A letter came to Fatima from a child'

However, when 3POSS is present, these case morphemes are preceded by an additional [n] (12-13):

(12) *Additional [n] in locative NP with 3POSS*

a. fatima-nɨ tepse-si-*(n)de küsün turadɨ
fatima-GEN chair-3POSS-LOC vase stands
'There is a vase on Fatima's table'

b. kitab anɨ šindig-i-*(n)de turadɨ
book 3SG.GEN chair-3POSS-LOC stands
'The book is on his/her chair'

(13) *Additional [n] in ablative NP with 3POSS*

a. fatima-nɨ bala-sɨ-*(n)dan qalʁanla barɨsɨda čai ičgendile
fatima-GEN child-3POSS-ABL besides all tea drank
'Everyone besides Fatima's child drank tea'

b. fatima-ʁa pismo qonšu-su-*(n)dan keldi
fatima-DAT letter neighbor-3POSS-ABL came
'A letter came to Fatima from her neighbor'

This additional [n] does not arise in un-possessed NPs, as (14) shows. Note that there is no phonological problem with such forms, since their consonant clusters would be resolved into legal CVC syllables.

(14) *No additional [n] in an un-possessed locative / ablative NP*

a. kitab tepse-(*n)de turadɨ
book table-LOC stands
'The book is on a table'

b. fatima-ʁa bala-(*n)dan keldi
fatima-DAT child-ABL came
'A letter came to Fatima from a child'

It also doesn't arise with possessive suffixes other than the 3rd person one (though as mentioned above, this could be due to a phonological conflict). In (15) below I show this fact only with 1st person possessive suffixes due to space limitations, but the same fact applies for 2nd person ones.

(15) *No additional [n] in locative / ablative NPs with other possessive suffixes*

a. kitab meni šindig-im-(*n/*in/*ni)de turadɨ
book 1SG.GEN chair-1SG.POSS-LOC stands
'A book is on my chair'

b. kitab bizni šindig-ibiz-(*n/*ni/*in)de turadɨ
book 1PL.GEN chair-1PL.POSS-LOC stands
'A book is on our chair'

c. fatima-ʁa pismo meni ustaz-ɨm-(*n/*ɨn/*nɨ)dan keldi
fatima-DAT letter 1SG.GEN teacher–1SG.POSS-ABL came
'A letter came to Fatima from my teacher'

d. fatima-ʁa pismo bizni ustaz-ɨbɨz-(*n/*ɨn/*nɨ)dan keldi
fatima-DAT letter 1PL.GEN teacher-1PL.POSS-ABL came
'A letter came to Fatima from our teacher'

In summary, the 3rd person possessive suffix causes accusative case to be realized as *-n* rather than the usual *-nI*. This same suffix triggers the addition of an initial segment [n] in the oblique cases locative and ablative. In the next section, I argue that the additional [n] we see in these oblique cases is in fact the accusative *-n*, and that these facts thus provide evidence for case containment.

3. The analysis

In this analysis I will use the Distributed Morphology framework (Halle & Marantz 1993, Harley & Noyer 1999, a.o.), for which morpho-phonological form is assigned to the terminal nodes of a syntactic structure after it is built. The rules that achieve this are termed Vocabulary Insertion (VI) rules. In (16) below we see an initial set of VI rules which, in the context of the case containment hypothesis, correctly predict the Balkar facts (aside from one further detail about accusative that I address shortly).

(16) *VI rules for Balkar nominal morphology (first version)*

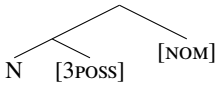
a. NOM ↔ -∅
b. GEN ↔ -nI
c. ACC ↔ -n / [3POSS __]
d. ACC ↔ -nI / elsewhere
e. $\text{OBL}_{[\text{LOC}]}$ ↔ -dA
f. $\text{OBL}_{[\text{ABL}]}$ ↔ -dAn
g. 3POSS ↔ -(s)I

Notice that here there are two VI rules for the realization of accusative case: one that realizes it as *-n* in the presence of 3POSS (16c), and another that realizes it as *-nI* otherwise (16d). Since accusative-genitive syncretism is cross-linguistically very rare (Baker 2015), I assume that the syncretism of these cases in non-possessed NPs in Balkar is accidental homophony, as the above rules reflect.[2]

I assume that possessive suffixes express a functional head between N and the case layer. For concreteness, I also assume that syntactic terminals are assigned linear order before VI rules apply to them (Embick 2010, Arregi & Nevins 2012, Haugen & Siddiqi 2016). In (17a), we see the structure for a nominative NP with 3POSS, and in (17b), we see how this structure is linearized and then subjected to VI:

(17) *Nominative NP with 3POSS*

a.

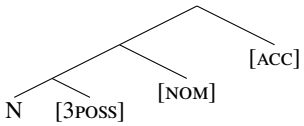


b. N 3POSS NOM
N -(s)I -∅

Assuming case containment, by adding an ACC feature to the structure in (17a) above, we construct an accusative NP. If 3POSS were absent, the ACC feature would be realized as *-nI* here, but in the presence of 3POSS, it will instead be realized as *-n* (18):[3]

(18) *Accusative NP with 3POSS*

a.

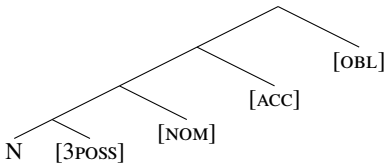


b. N 3POSS NOM ACC
N -(s)I -∅ -n

Given case containment, all that differentiates an oblique NP with 3POSS from the above is the inclusion of the OBL feature on top of ACC. In this situation, 3POSS causes ACC to be realized as *-n* as we saw before, and the oblique feature will be expressed by usual oblique marking of whatever sort (19):

(19) *Oblique NP with 3POSS*

a.



b. N 3POSS NOM ACC OBL
N -(s)I -∅ -n -dA/dAn

[2] Baker cites Lander (2008) for this observation, following which he notes that only Balkar and Martuthunira are so far known to show accusative-genitive syncretism.

[3] The rule in (16c) above that causes ACC to be realized as *-n* in the presence of 3POSS is a rule of contextual allomorphy. Previous works have argued that contextual allomorphy requires either linear adjacency (Embick 2010) or structural adjacency (Bobaljik 2012) between an allomorph and the element that triggers its use. Notice that in (18) and (19), ACC is not structurally adjacent to 3POSS because NOM intervenes. Whether ACC is linearly adjacent to 3POSS depends whether the null exponent for NOM is really a part of the linear representation or not. Moskal (2015a,b) and Moskal & Smith (2016) argue that allomorphic dependencies are not constrained by strict adjacency, but instead depend on the allomorph and trigger being in the accessibility domain of the same morpho-syntactic cycle. Assuming that the nominal phrase is a cycle, this approach correctly permits 3POSS to trigger allomorphy of ACC in (18/19). Alternatively, if there is not in fact a syntactic head corresponding to nominative case (McFadden 2018), this puzzle dissolves.

The diagrams in (17-19) above accurately describe the form of Balkar NPs containing 3POSS. Importantly, we see that an explanation for the form of these NPs arises straightforwardly, and essentially automatically, when we adopt the case containment hypothesis.

3.1. A further detail about un-possessed oblique NPs

The above account makes an inaccurate prediction about un-possessed oblique NPs. If the accusative sub-part of an oblique NP is realized as /-n/ when 3POSS is present, as we saw in (19), then when an oblique NP lacks [textsc3poss, the accusative feature it contains should be assigned its default expression *-nI*. This is not what happens in reality. In fact, as we've seen, the assumed accusative feature receives no overt morphological form, as (20) shows explicitly. This is a puzzle for what I have proposed so far.

(20) *No accusative -nI in un-possessed oblique NPs*

a. kitab šindig-(*ni)-de turadɨ
book chair-(ACC)-LOC stands
'A book is on the chair'

b. fatima-ʁa pismo ustaz-(*nɨ)-dan keldi
fatima-DAT letter teacher-(ACC)-ABL came
'A letter came to Fatima from the teacher'

As discussed above, Smith et al. (2019) show two languages where case containment is surface evident, but this is not so for the vast majority of languages. Inevitably, different languages will make different decisions about how to express case features. To account for the facts just described, I hypothesize that the realization of ACC in Balkar is governed by the three ordered VI rules in (21):

(21) *Ordered VI rules for the Balkar accusative*

a. ACC ↔ -n / [3POSS __] b. ACC ↔ -∅ / [__ OBL] c. ACC ↔ -nI / elsewhere

First the rule in (21a) is attempted, which will realize ACC as *-n* if 3POSS is present in the same NP. If (21a) cannot apply, then (21b) is attempted, which assigns ACC a null exponent if OBL is present. If both (21a) and (21b) fail to apply, the elsewhere rule in (21c) is then triggered, which realizes ACC as *-nI*.

3.2. On dative

Balkar has one other oblique case, dative, which has at least two forms: *-nA* and *gA*.[4] The distribution of the two is in part phonologically determined, but some of the time, they are in free variation (22):

(22) *Dative free variation*

a. alim surat-nɨ sabij-ge/ne berdi
alim picture-ACC child-DAT gave
'Alim gave the picture to a child'

b. alim surat-nɨ ustaz-lar-ʁa/na berdi
alim picture-ACC teacher-PL-DAT gave
'Alim gave the picture to the teachers'

In the context of 3POSS the dative form *-nA* must be used (23):

(23) *Dative -nA with [3POSS]*

a. alim surat-nɨ anɨ ustaz-ɨ-na/*ʁa berdi
alim picture-ACC 3SG.GEN teacher-3POSS-DAT gave
'Alim gave the picture to her/his teacher'

b. alim surat-nɨ anɨ bala-sɨ-na/*ʁa berdi
alim picture-ACC 3SG.GEN child-3POSS-DAT gave
'Alim gave the picture to his/her child'

[4] *-gA* is realized as /ge/ when harmonizing with a front vowel, and /ʁa/ when harmonizing with a back vowel.

Since dative case is *-na* when 3POSS is present, given case containment, we expect the accusative feature contained by dative case to be realized as *-n*, yielding the possessed dative form *-(s)Inna*. As we see in (23) above, in fact we only see the morphology *-(s)Ina*, which does not have the predicted [nn]. Explicitly testing the form *-(s)Inna* received a negative judgment (24):

(24) *Dative with 3POSS cannot be -(s)Inna*

alim surat-nɨ a-la-nɨ bala-lar-ɨ-(*n)-na berdi
alim picture-ACC 3SG-PL-GEN child-PL-3POSS-(ACC)-DAT gave

'Alim gave the picture to their children'

I hypothesize that the underlying form of such datives is in fact /(s)Inna/, but that a phonological process reduces the /nn/ cluster to a single [n]. There is independent evidence for such a process from pronominal morphology. As (25) below shows, accusative/genitive plural pronouns are simply built from the nominative form, with the addition of a suffix *-nI* (setting aside an unrelated vowel change in the 3rd person). However, while the third person singular is less straightforward, the first and second person singular accusative / genitive forms appear to involve the addition of a suffix *-i* to the nominative form:

(25) *Partial list of Balkar pronouns*

	1SG	2SG	3SG	1PL	2PL	3PL
NOM	men	sen	ol	biz	siz	ala
ACC/GEN	meni	seni	ani	bizni	sizni	alani

Setting aside the accusative allomorphy described above, we have seen that accusative / genitive morphology in Balkar is generally *-nI*, never *-I*. It fits the facts to posit that the first and second person plural pronouns in accusative / genitive case are underlyingly /mennI/ and /sennI/, but that a phonological process simplifies the /nn/ cluster to [n] in these forms. Balkar speakers indeed pronounce these forms as [meni] and [seni], though some speakers suggested spelling them as "menni" and "senni". This is unsurprising, since under the analysis proposed above, these spelling suggestions match the expected underlying representation that I have posited. Furthermore and as expected, the string [nn] is generally absent from the Balkar data available to me. Thus there is evidence for the hypothesis that in dative NPs with 3POSS, the underlying form is /-(s)I-n-na/ as expected, but that the /nn/ cluster is reduced.[5]

3.3. Final note: Containment of obliques

Caha (2009) argues for a more complex case hierarchy, in which there is also a containment relationship between the oblique cases. Caha (2013), in particular, argues that locative case is a sub-part of the ablative (among various other relations). This is surface-evident in Balkar, for which the locative is *-dA*, and the ablative is *-dAn*, as we have seen in numerous examples above. Thus Balkar provides an additional piece of evidence consistent with recent proposals about case containment.

[5] There is additional evidence for a phonological constraint penalizing the cluster [nn]. When a name ending in /n/ like "Aslan" is marked with the dative suffix *-nA*, the result is unacceptable, unless the initial /n/ of the dative marker is exceptionally changed to [ŋ]. This modification in place of articulation eliminates the potential [nn] cluster:

(i) alim surat-nɨ aslan-ŋa/*na berdi
alim picture-ACC aslan-DAT gave
'Alim gave the picture to Aslan'

4. Conclusion

A variety of recent works in morpho-syntax have argued for a case containment hierarchy, based on cross-linguistic facts about phenomena like suppletion and syncretism. Balkar provides relatively transparent evidence that oblique cases contain accusative features, and thus contributes to the growing body of support for the case containment hypothesis.[6]

References

Marantz, Alec. 1991. Case and Licensing. In Westphal G., Ao B. & Chae H.R. (eds.), *Proceedings of ESCOL 91*, 234–53. Ohio State University: Cornell Linguistics Club.

Halle, Morris & Alec Marantz. 1993. Distributed morphology and the pieces of inflection. In Ken Hale & Samuel Jay Keyser (eds.), *The View From Building 20*, 1–52. MIT Press.

Harley, Heidi & Rolf Noyer. 1999. Distributed morphology. *Glot International* 4. 3–9.

Lyutikova, Ekaterina, Michail Ivanov, Anna Pazelskaya, Sergei Tatevosov & Andrey Shluinsky. 2006. *Struktura sobitija i semantika glagola v karachayevo-balkarskom jazyke (event structure and verb semantics in karachay-balkar)*. Moscow: IMLI RAN.

Lander, Yury. 2008. Varieties of genitive. In Andrej Malchukov & Andrew Spencer (eds.), *The oxford handbook of case*, 581–592. Oxford University Press.

Caha, Pavel. 2009. *The Nanosyntax of Case*. PhD Thesis, University of Tromso.

Embick, David. 2010. *Localism versus Globalism in Morphology and Phonology*. MIT Press Linguistic Inquiry Monographs, Cambridge: MA.

Arregi, Karlos & Andrew Nevins. 2012. *Morphotactics: basque Auxiliaries and the Structure of Spellout*. Dordrecht: Springer.

Bobaljik, Jonathan. 2012. *Universals in Comparative Morphology: Suppletion, superlatives, and the structure of words*. MIT Press.

Caha, Pavel. 2013. Explaining the structure of case paradigms through the mechanisms of nanosyntax. *Natural Language and Linguistic Theory* 31. 1015–1066.

Baker, Mark. 2015. *Case: Its Principles and Parameters*. Cambridge University Press.

Moskal, Beata. 2015a. *Domains on the border: Between morphology and phonology*. Doctoral Dissertation, University of Connecticuit.

Moskal, Beata. 2015b. Limits on allomorphy: A case-study in nominal suppletion. *Linguistic Inquiry* 46. 363–375.

Harðarson, Gíslí Rúnar. 2016. A case for a Weak Case Contiguity hypothesis - A reply to Caha. *Natural Language & Linguistic Theory* 34. 1329–1343.

Haugen, Jason & Daniel Siddiqi. 2016. Towards a restricted realization theory: Multi-morphemic monolistemicity, portmanteaux, and post-linearization spanning. In Heidi Harley & Daniel Siddiqi (eds.), *Morphological Metatheory*, 343–386. John Benjamins, Amsterdam.

Moskal, Beata & Peter Smith. 2016. Towards a theory without adjacency: hyper-contextual VI rules. *Morphology* 26. 10.1007/s11525-015-9275-y, 295–312.

Starke, Michal. 2017. Resolving (DAT = ACC) ≠ GEN. *Glossa: A Journal of General Linguistics* 2. 1–8.

Zompì, Stanislao. 2017. *Case decomposition meets dependent-case theories*. MA Thesis, University of Pisa.

McFadden, Thomas. 2018. *ABA in stem-allomorphy and the emptiness of the nominative. *Glossa: A Journal of General Linguistics* 3. https://doi.org/10.5334/gjgl.373, 1–36.

Moskal, Beata. 2018. Excluding exclusively the exclusive: suppletion patterns in clusivity. *Glossa* 3. 1–34.

Smith, Peter, Beata Moskal, Ting Xu, Jungmin Kang & Johathan Bobaljik. 2019. Case and number suppletion in pronouns. *Natural Language and Linguistic Theory* 37. 1029–1101.

Davis, Colin. 2021. *Case-driven plural suppletion in Barguzin Buryat: On case containment, suppletion typology, and competition in morphology.* Manuscript accepted to Glossa.

Bondarenko, Tanya & Colin Davis. To appear. Long-Distance Scrambling in Balkar and the Nature of Edges. In *Proceedings of the 38th meeting of the West Coast Conference on Formal Linguistics*. Cascadilla Proceedings Project, Somerville MA.

[6] Genitive case has been omitted from this paper's discussion of case containment. The status of genitive remains a subject of difficulty in the case containment literature (see Harðarson 2016, Starke 2017, Davis 2021). The fact that in Balkar genitive case does not interact in any obvious way with the facts in focus here suggests that genitive either sits outside of the hierarchy in this language, or is subject to additional confounds that obscure its participation in case containment. Since genitive in Balkar does not tell us anything interesting about case containment, I set it aside.