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The Morphology of Case and Possession in Balkar: Evidence that Oblique Cases Contain Accusative †

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Abstract: This paper uses facts about case allomorphy and possessive morphology in Balkar, a Turkic language spoken in southern Russia, to contribute to the examination of the internal structure of case. A number of recent findings in morpho-syntactic research indicate that case markers have a richer internal structure than their surface appearance typically suggests. Specifically, many works in this vein argue based on cross-linguistic facts about phenomena such as suppletion and syncretism that case features are organized into an implicational containment hierarchy. In this hierarchy, accusative case contains the features of the nominative, and the accusative is itself a sub-part of oblique cases. Many arguments for case containment have relied on diagnostics that are less direct than surface-level morpho-syntactic analysis. In this paper, I argue that there is a part of Balkar grammar that shows the containment of accusative case by obliques in a surface-evident way. While such containment is not normally evident in Balkar, I argue that in certain possessed oblique NPs we see an overt expression of the accusative, except when phonological factors interfere. I go on to discuss other related topics about Balkar and the case containment hypothesis more generally.

Keywords: syntax; morphology; case; case containment; allomorphy; Turkic; Balkar

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1. Introduction

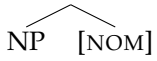
This paper uses facts about case allomorphy and possessive morphology in Balkar (Turkic) to contribute to the examination of the internal structure of case. Recent findings in morpho-syntactic research indicate that case markers frequently have a richer internal structure than their surface appearance typically suggests. Specifically, many works in this vein argue based on cross-linguistic facts about phenomena such as suppletion and syncretism that case features are organized into an implicational containment hierarchy. See, for instance, Caha (2009, 2013); Moskal (2015a); Moskal and Smith (2016); Smith et al. (2019); Zompì (2017), and Davis (2021a).[1] The main goal of this paper is to argue that Balkar provides further evidence for this finding.

1.1. Background on Case Containment

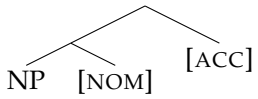
Though differing in terminology and implementation, many of the works just cited argue for (at least) the case containment relationships schematized in (1) below. In (1a), we see that the node bearing nominative case combines directly with the noun, whereas in (1b) we see that accusative case contains the structure corresponding to nominative case. Finally, (1c) states that oblique cases (locative, ablative, dative, etc.) contain the accusative, which in turn contains the nominative as just mentioned:

(1) *Basic case containment relations*

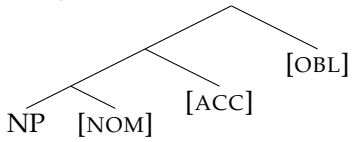
a. *Nominative*



b. *Accusative contains nominative*



c. *Oblique contains accusative, which contains nominative*



Some works such as Caha (2009, 2013) argue for a more articulated hierarchy in which the different oblique cases have different positions, with some obliques containing others (see Section 5.2 below). In contrast, Zompì (2017), Smith et al. (2019) and Davis (2021a) argue for a more compressed hierarchy like that in (1) above, which considers all oblique cases to have the same position in the hierarchy. This relatively conservative containment hierarchy will be sufficient for the majority of this paper's analysis. Specifically, the main goal of this paper is to argue that Balkar provides new evidence that oblique cases contain accusative as a sub-part. I argue that adopting this hypothesis facilitates a simple analysis of an otherwise idiosyncratic case pattern in this language.

1.2. Preview of the Balkar Facts

The Balkar facts reported here were gathered through fieldwork elicitation with about ten native Balkar speakers in August 2019, in the village Verkhnyaya Balkaria in the Kabardino-Balkarian Republic, Russia. This language is often referred to as "Karachay-Balkar", though here I use the term "Balkar" since the speakers consulted in this fieldwork identify themselves as Balkar people. Fieldwork elicitation sessions consisted of asking speakers to translate test sentences into Balkar (both orally and in writing), and to rate the acceptability of pre-prepared Balkar test sentences. The patterns shown here are consistent across speakers.

To preview the relevant Balkar data, see the facts in (2) below. While accusative case in Balkar is usually expressed by a suffix *-nI* as in (2a), when adjacent to the third person possessive marker *-(s)I* this case is instead expressed as *-n*, as (2b) shows. Importantly, in oblique case contexts that contain *-(s)I*, what I argue to be the accusative variant *-n* is also contained by the oblique case marker. We see this in a locative context by comparing (2c) with (2d). The locative case is usually expressed simply by a suffix *-dA* as (2c) shows. However, in a context containing *-(s)I* this case suffix is preceded by *-n*, as (2d) shows. I argue that this is an instance of surface-evident case containment.[2]

(2) *The core Balkar facts*

a. *Basic Balkar accusative*

men bala-nɨ köröme
1SG child-ACC see

'I see a child'

b. *Accusative allomorphy in possessed NPs*

men fatima-nɨ bala-sɨ-n/*nɨ körgemme
1SG fatima-GEN child-3POSS-ACC saw

'I saw Fatima's child'

c. *Usual Balkar locative*

tepse-de küsün turadɨ
table-LOC vase stands

'A vase is on a table'

d. *The accusative allomorph appears within the possessed locative*

fatima-nɨ tepse-si-*(n)de küsün turadɨ
fatima-GEN chair-3POSS-LOC vase stands

'There is a vase on Fatima's table'

I will show that this case containment is clear for the Balkar locative and ablative, but not the dative, in which we also expect to see containment of accusative morphology. I will argue that this exception is due to the interference of a phonological factor. The entire case paradigm for Balkar, which I discuss step by step in this paper, is shown in the table in (3) below. Notice that in un-possessed contexts, accusative and genitive case are syncretic in Balkar. I will assume that this is a coincidence, but I discuss genitive case in more detail later on.

(3) *Balkar case morphology*

	NOM	ACC	LOC	ABL	DAT	GEN
TYPICAL	-∅	-nI	-dA	-dAn	-nA/-gA	-nI
POSSESSED	-∅	**-n**	**-n**dA	**-n**dAn	-nA/-gA	-nI

While Balkar does not systematically show case containment, we see in the second row of this table that in possessed contexts, a potential instance of case containment is evident. Specifically, this occurs when the possessor is third person, as we'll see. In this paper, I will address the behavior of each of these cases in a way that is consistent with my arguments that this sub-part of Balkar grammar shows containment of accusatives by obliques.

1.3. Previous Work on Surface-Evident Case Containment

If a case containment hierarchy like that in (1) is universal, then we expect to see this containment expressed overtly in at least some languages, as I argue is so in Balkar. While overt case containment is not typical, it is indeed attested. For instance, Smith et al. (2019) observe that in two languages, Khanty and Kalderaš Romani, we see containment of nominative, accusative, and dative forms in precisely the way we expect, as in (4) below:

(4) *Examples of surface-evident case containment*
(Adapted from Smith et al. 2019: p. 1037)

a. *Khanty*

	NOM	ACC	DAT
1SG	ma	ma:-ne:m	ma:-ne:m-na
3SG	luw	luw-e:l	luw-e:l-na
1PL	muŋ	muŋ-e:w	muŋ-e:w-na

b. *Kalderaš Romani*

	NOM	ACC	DAT
'brother'	phral	phral-és	phral-és-kə
'brothers'	phral-(à)	phral-én	phral-én-gə
'girl'	rakl-í	rakl-já	rakl-já-kə
'girls'	rakl-já	rakl-já-n	rakl-já-n-gə

See further Caha (2010), who shows accusative containment in languages including Kazakh, Wakhi, and West Tocharian, as well as Caha and Türk (2021), who discuss accusative containment in Turkish and Azeri. While surface-evident case containment patterns thus do exist, this is likely not a pervasive morphological phenomenon, since many arguments for case containment have relied on diagnostics that are less direct than surface-level morpho-syntactic analysis. For instance, much research in this vein draws inferences from patterns of suppletion and syncretism, as mentioned above and discussed further in Section 2 below. If the analysis of Balkar in this paper is correct, then this language provides yet another piece of evidence for accusative containment in Turkic (in addition to at least Azeri, Kazakh, and Turkish).

1.4. Contents of the Paper

In Section 2, I provide background on a theory about how case allomorphy relates to the case containment hypothesis. In Section 3, I describe the relevant facts about Balkar case and possessive morphology in detail. Section 4 provides the core analysis, focusing on accusative containment by locative and ablative. Section 5 discusses the Balkar dative, which I argue does not show accusative containment due to a phonological problem. Here I also show evidence for potential containment of locative by ablative. Section 6 discusses the Balkar genitive. Section 7 addresses why surface-evident case containment is not a typical state of affairs in human language. Section 8 concludes.

2. Background on Case Containment and Case Allomorphy

This paper builds on research examining a generalization about the relationship between structural containment and the distribution of allomorphy. A number of recent works in morpho-syntax argue for a generalization like that in (5) below. This generalization, which is essential for the analysis of this paper, is supported by facts about adjective suppletion (Bobaljik 2012), the morphology of in/ex-clusivity (Moskal 2018), and case-sensitive pronoun suppletion (Smith et al. 2019):

(5) *Generalization about allomorphy rules in syntactic containment hierarchies*[3]
If an element α undergoes allomorphy in the context of a syntactic feature/category β, then α will also undergo allomorphy 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 (1c), we make the additional prediction in (6):

(6) *Prediction about allomorphy in oblique cases given case containment*
An allomorphy process triggered by accusative case should also be triggered by oblique cases, since the former is a part of the latter.

Smith et al. (2019) argue based on a cross-linguistic study of pronominal suppletion that this prediction (among other related ones) is correct. Some relevant data are provided in (7) below. Here we see patterns where there is a pronominal root (in bold) whose form in both accusative and dative environments is the same, setting aside some minor phonological differences (vowel height in Latin, accent in Lithuanian, vowel deletion in Russian). For analogous findings about cross-linguistic case syncretism, see Caha (2009).

(7) *Case-sensitive suppletion in Indo-European 1st person singular pronouns*
(Adapted from Smith et al. 2019: p. 1042)

	NOM	ACC	DAT
German	ich	**mi**ch	**mi**r
Greek	egō	**eme**	**em**oi
Latin	ego	**mē**	**mi**hi
Lithuanian	àš	**man**è	**mán**
Russian	ja	**menj**a	**mnj**e

As Smith et al. (2019) do, in this paper I will formalize my analysis using the Distributed Morphology theory (Embick and Marantz 2008; Halle and Marantz 1993; Harley and Noyer 1999, a.o.). This theory hypothesizes that 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. We can use this theory to understand patterns like that in (7) above in the following way: if there is a VI rule that changes the form of a pronoun in the accusative case, then in oblique contexts that same VI rule will apply, since oblique structures also contain the accusative. For example, consider the Russian data from (7). If oblique contexts contain accusative case (even if we do not see it expressed by a distinct morpheme), then we will accurately describe the alternation in the Russian 1st person pronoun with the VI rules in (8) below (simplifying the phonology for convenience).

(8) *Some VI rules for the Russian 1st person singular pronoun*

a. $N_{[1P.SG]} \leftrightarrow$ ja

b. $N_{[1P.SG]} \leftrightarrow$ m(e)nj / __ [ACC]

The VI rule in (8a) states that the form *ja* is simply default, since it is not specified for a particular context. In contrast, the rule in (8b) is context sensitive: this rule determines that the 1st person singular pronoun should be morphologically expressed as *m(e)nj* when local to accusative case. Importantly, notice that if oblique case structures contain accusative case, the rule in (8b) will be triggered in both accusative and oblique case environments. This is exactly the right prediction, as we can see in (7) above. The same sort of analysis can be applied to numerous languages, which Smith et al. (2019) take as evidence that oblique structures do indeed contain the accusative.

In this paper, I argue that similar considerations explain an otherwise idiosyncratic pattern in the case system of Balkar. We will see that an instance of context-sensitive allomorphy in Balkar reveals an instance of surface-evident case containment, indicating that oblique cases contain the accusative. In the next section, we will see the relevant Balkar facts in detail.

3. 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; Tatevosov 2008; Bondarenko and Davis, n.d.). Its case morphology has not been studied in detail, and the phenomenon in focus in this paper has as far as I know never been analyzed.

The phenomenon in focus here relates to the form of accusative case in Balkar, and its relationship to the morphological expression of certain oblique cases. In this language, accusative and genitive case are typically both expressed as *-nI*, as shown respectively by (9) and (10) below. Like most Turkic languages, Balkar has vowel harmony for frontness/backness and roundness. In this paper we will see /I/, a harmonizing high vowel, and /A/, a harmonizing low vowel. Depending on phonological context, the first can be realized as [i], [ɨ], [y], or [u], while the second will be realized as [e] or [a]. I set the details of vowel harmony aside, since they do not affect this paper's analysis.

(9) *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'

(10) *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. biz-ni qonšu-buz-nu kištig-i čičʁan tutdu
1PL-GEN neighbor-1PL.POSS-GEN cat-3POSS mouse caught
'Our neighbor's cat caught a mouse'[4]

c. 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 noun is possessed, it carries a suffix agreeing with the person and number features of its possessor. Some instances of such morphology can be seen in the possessed NPs in (10) above. For this paper, only the 3rd person possessive suffix *-(s)I* is relevant, which I gloss as "3POSS". We see a straightforward instance of this morpheme in a basic nominative NP below.[5]

(11) *Third person possessive suffix*

a. fatima-nɨ bala-si-∅ it-ne sɨladɨ
fatima-GEN child-3POSS-NOM dog-DAT petted
'Fatima's child petted the dog'

Importantly, accusative case is expressed as *-n* rather than *-nI* when adjacent to 3POSS, as we see in (12) below. Since examples like (11) above and others throughout this paper show us that *-(s)I* is a stand-alone morpheme, the most straightforward analysis of these examples is that *-(s)I* behaves as usual here, while the expression of accusative case alone is modified.[6]

(12) *Accusative allomorphy with 3rd person possessive suffix*

a. men fatima-nɨ bala-si-n/*nɨ körgemme
1SG fatima-GEN child-3POSS-ACC saw
'I saw Fatima's child'

b. men fatima-nɨ kištig-i-n/*nɨ körgemme
1SG fatima-GEN cat-3POSS-ACC saw
'I saw Fatima's cat'

c. men fatima-nɨ ustaz-i-n/*nɨ körgemme
1SG fatima-GEN teacher-3POSS-ACC saw
'I saw Fatima's teacher'

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

e. 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 (13) shows:

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

a. men bala-nɨ/*n körgemme
1SG child-ACC saw
'I saw a child'

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

c. men ali-ni/*n körgemme
1SG ali-ACC saw
'I saw Ali'

d. 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 (14) 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 (14) shows. Since Balkar has a maximum syllable size of CVC, it is conceivable that the accusative allomorph *-n* does not occur with other possessive markers because it would create an illegal CC coda. In (14), 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 (as we see happening to the accusative *-nI* in some of the examples below), this was also attempted as a way of rescuing use of the *-n* accusative, but ultimately rejected. Speakers offered no way of improving examples using accusative *-n* with non-3rd-person possessors, other than to use the usual accusative *-nI* instead.[7]

(14) *No accusative allomorphy in non-3rd-person possessive contexts*

a. *-nI accusative with first person singular possession*

kerim meni bala-m-mɨ / sabij-im-mi köredi
kerim 1SG.GEN child-1SG.POSS-ACC / child-1SG.POSS-ACC sees

'Kerim sees my child.'

b. *No -n accusative with first person singular possession*

* 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.'

c. *-nI accusative with first person plural possession*

kerim biz-ni bala-bɨz-nɨ / sabij-ibiz-ni köredi
kerim 1PL-GEN child-1PL.POSS-ACC / child-1PL.POSS-ACC sees

'Kerim sees our child.'

d. *No -n accusative with first person plural possession*

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

'Kerim sees our child.'

e. *-nI accusative with second person singular possession*

kerim seni bala-ŋ-ŋɨ / sabij-iŋ-ŋi köredi
kerim 2SG.GEN child-2SG.POSS-ACC / child-2SG.POSS-ACC sees

'Kerim sees your (SG) child.'

f. *No -n accusative with second person singular possession*

* 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.'

g. *-nI accusative with second person plural possession*

kerim siz-ni bala-ʁɨz-nɨ / sabij-igiz-ni köredi
kerim 2PL-GEN child-2PL.POSS-ACC / child-2PL.POSS-ACC sees

'Kerim sees your (PL) child.'

h. *No -n accusative with second person plural possession*

* 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.'

In summary, it is conceivable that the *-n* accusative variant would be able to occur in all possessive contexts if its distribution were not restricted by phonological considerations. However, for the purposes of this paper it is sufficient to assume that the *-n* accusative is only triggered by the 3POSS morpheme, presumably via a rule of morpho-syntactically conditioned contextual allomorphy. I provide an explicit set of VI rules for Balkar case and possessive morphology in Section 4 below. Before that, there are a number of other facts that must be described.

Importantly, there is evidence that the alternation between the usual accusative *-nI* and its variant *-n* is morpho-syntactically conditioned, rather than the product of a phonological process. Though genitive case is usually syncretic with accusative in Balkar, genitive case remains *-nI* even when adjacent to the 3POSS suffix (15):

(15) 3POSS *does not trigger allomorphy for genitive case*

a. [fatima-nɨ bala-si-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 phonology is not responsible for the accusative alternation just described. Thus, I argue that the alternation between the accusative variants *-nI* and *-n* is indeed syntactically conditioned. See Section 6 for further discussion of genitive-accusative syncretism in Balkar and beyond.

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* and ablative is *-dAn*, as we see respectively in (16) and (17) below:

(16) *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'

c. fatima kerim-ni qonšu-su-nu xatasɨndan üj-de qalʁandɨ
fatima kerim-GEN neighbor-3POSS-GEN because home-LOC stayed

'Fatima stayed home because of Kerim's neighbor'

(17) *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'

c. sabij-den qalʁanla bariɨ-siɨ-da čai ištile
child-ABL besides all-3POSS-DAT tea drank
'Everyone besides the child drank tea'

However, when 3POSS is present, these case morphemes are necessarily preceded by an additional [n], as shown in (18) and (19):

(18) *Additional [n] in locative with 3rd person possessive suffix*

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

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

c. bala-lar-i-*(n)da
child-PL-3POSS-LOC
'On his/her children'

(19) *Additional [n] in ablative with 3rd person possessive suffix*

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

b. fatima-niɨ sabij-i-*(n)den qalʁanla bariɨ-siɨ-da čai ištile
fatima-GEN child-3POSS-ABL besides all-3POSS-DAT tea drank
'Everyone besides Fatima's child drank tea'

c. fatima-niɨ bala-si-*(n)dan qalʁanla bariɨ-siɨ-da čai ičgendile
fatima-GEN child-3POSS-ABL besides all-3POSS-DAT tea drank
'Everyone besides Fatima's child drank tea'

This additional [n] does not arise in un-possessed oblique NPs, as (20) shows. While there is a potential consonant cluster problem (which no epenthesis can ameliorate) in examples (20c-d) which involve consonant-final nouns, this issue does not arise in the vowel-final noun examples in (20a-b). In these examples any potential consonant cluster could be resolved into legal CVC syllables. For example */tepse-nde/ (table-LOC) in (20a) could be syllabified as [tep.sen.de], which does not violate Balkar phonotactics. Nevertheless, such forms are impossible, showing that the distribution of this [n] has to do with morpho-syntax, not phonology.

(20) *No additional [n] in un-possessed locative / ablative NPs*

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'

c. * kitab šindig-(i)n(i)de turadɨ
book chair-LOC stands
'The book is on a chair'

d. * fatima-ʁa pismo ustaz-(ɨ)n(ɨ)dan keldi
fatima-DAT letter teacher-ABL came
'A letter came to Fatima from a teacher'

This [n] also does not arise in oblique NPs with possessive suffixes other than the 3rd person one, as we see in (21) below. Since all possessive suffixes other than *-(s)I* end in consonants, and because the locative and ablative suffixes begin with consonants, the use of the accusative variant *-n* between these elements could be banned due to generating illegal consonant clusters. In the examples of (21), epenthesis was used to attempt to ameliorate this potential issue, though this did not succeed.[8] Therefore there is, as far as I know, no way for the relevant *-n* to occur with possessive suffixes other than the 3rd person one.

(21) *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 biz-ni šindig-ibiz-(*n/*nɨ/*ɨn)de turadɨ
book 1PL-GEN chair-1PL.POSS-LOC stands
'A book is on our chair'

c. kitab seni šindig-iŋ-(*n/*nɨ/*ɨn)de turadɨ
book 2SG.GEN chair-2SG.POSS-LOC stands
'A book is on your (SG) chair'

d. kitab siz-ni šindig-igiz-(*n/*nɨ/*ɨn)de turadɨ
book 2PL-GEN chair-2PL.POSS-LOC stands
'A book is on your (PL) chair'

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

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

g. fatima-ʁa pismo seni ustaz-iŋ-(*n/*ŋ/*ɨn/*nɨ)dan keldi
fatima-DAT letter 2SG.GEN teacher-2SG.POSS-ABL came
'A letter came to Fatima from your (SG) teacher'

h. fatima-ʁa pismo siz-ni ustaz-iʁiz-(*n/*ɨn/*nɨ)dan keldi
fatima-DAT letter 2PL-GEN teacher-2PL.POSS-ABL came
'A letter came to Fatima from your (PL) 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 [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. In the following sections, I address the remaining oblique case, dative, as well as a number of other related topics.

4. The Case Containment Analysis of Balkar

As previewed above, in this analysis I will use the Distributed Morphology theory (Halle and Marantz 1993; Harley and 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 (22) below, we see an initial set of VI rules which, in the context of the case containment hypothesis, will correctly predict the Balkar facts (aside from one further detail about accusative case that I address shortly).

(22) *VI rules for Balkar nominal morphology*

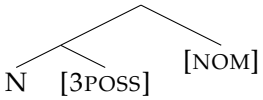
a. NOM ↔ -∅
b. GEN ↔ -nI
c. ACC ↔ -n / [3POSS __]
d. ACC ↔ -nI / elsewhere
e. $\text{OBL}_{[\text{LOC}]}$ ↔ -dA
f. $\text{OBL}_{[\text{ABL}]}$ ↔ -dAn
g. 3POSS ↔ -(s)I

Notice that here there are two VI rules for accusative case: one that realizes it as *-n* in the presence of 3POSS (22c), and another that realizes it as *-nI* otherwise (22d). I assume that the syncretism of these cases in non-possessed NPs in Balkar is accidental homophony, as the above rules show, rather than the reflection of any deep morpho-syntactic relationship between accusative and genitive case. See Section 6 for more discussion of this point, however.

I assume that possessive suffixes express a functional head between N and the case layer. This position could be D, or a dedicated possession phrase above NP but below D (see Huang (2020) and references therein), though my analysis does not depend on a specific proposal about this. For concreteness, I also assume that syntactic terminals are assigned linear order before VI rules apply to them (Arregi and Nevins 2012; Embick 2010; Haugen and Siddiqi 2016). In (23a) below, we see the structure for a nominative NP with 3POSS, and in (23b), we see how this structure is linearized and then subjected to VI:

(23) *Nominative NP with* 3POSS

a. *Structure*



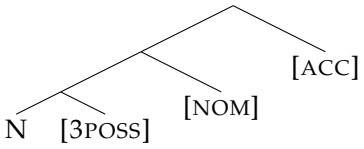
b. *Linearization and VI*

N 3POSS NOM
N -(s)I -∅

Assuming case containment, by adding an ACC feature to the structure in (23a) 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* (24):

(24) *Accusative NP with* 3POSS

a. *Structure*



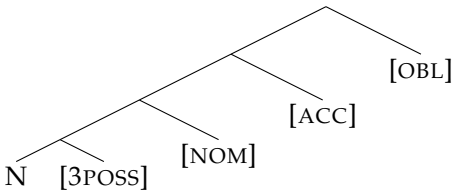
b. *Linearization and VI*

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 above, and the oblique feature will be expressed by usual oblique marking of whatever sort, as diagrammed in (25):

(25) *Oblique NP with* 3POSS

a. *Structure*



b. *Linearization and VI*

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

The diagrams in (23–25) above accurately describe the form of Balkar NPs containing 3POSS. Importantly, we see that an explanation for the form of these NPs arises automatically when we adopt the hypothesis that oblique cases contain accusative case.

4.1. On Allomorphy, Adjacency, and the Role of Nominative Case

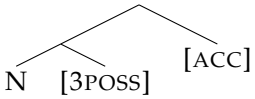
The VI rule in (22c) above that causes ACC to be realized as *-n* in the presence of 3POSS is a rule of contextual allomorphy. Previous works have argued that contextual allomorphy requires either linear adjacency (Embick 2010) or structural adjacency (Bobaljik 2012) between an allomorph and the element that triggers its use. Notice that in (24) and (25), ACC is not structurally adjacent to 3POSS because NOM intervenes. Whether ACC is linearly adjacent to 3POSS depends on whether the null exponent for NOM is really a part of the linear representation or not, though Embick (2010) argues that null nodes are 'pruned' from the representation and thus do not interrupt allomorphy.

In contrast, Moskal (2015a, 2015b) and Moskal and Smith (2016) argue that allomorphic dependencies are not constrained by strict (structural or linear) adjacency, but instead depend on the allomorph and trigger being in the same morpho-syntactic cycle. Assuming that the nominal phrase is a cycle (or more specifically a *phase* in the sense of Chomsky (2000, 2001), a.o.), this approach correctly permits 3POSS to trigger allomorphy of ACC in (23–25).[9]

Alternatively, if there is not in fact a syntactic head/feature corresponding to nominative case (see McFadden 2018 and references therein), this puzzle dissolves. This perspective is natural for the analysis of Balkar since its nominative nouns are simply unmarked, as is the case in Turkic languages generally. In (26) and (27) below, we see concretely that the adjacency issue is removed if nominative case is not in fact present in the syntactic representation:

(26) *Accusative NP with* 3POSS *(revised)*

a. *Structure*

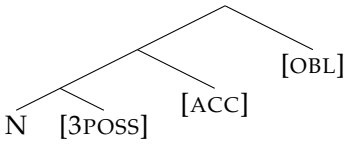


b. *Linearization and VI*

N	3POSS	ACC
N	-(s)I	-n

(27) *Oblique NP with* 3POSS*: Accusative case expressed by its -n allomorph (revised)*

a. *Structure*



b. *Linearization and VI*

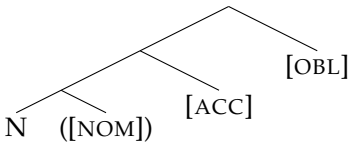
N 3POSS ACC OBL
N -(s)I -n -dA/dAn

4.2. The Absence of Accusative Morphology in Un-Possessed Oblique NPs

What I have said so far 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, then when an oblique NP lacks 3POSS, the accusative feature it contains should be assigned its default expression *-nI*. This is not what happens in reality. This incorrectly predicted form is illustrated in (28) below:

(28) *Incorrect prediction: -nI will occur in obliques when* 3POSS *is absent*

a. *Structure*



b. *Linearization and VI*

N ([NOM]) ACC OBL
N -∅ *-nI -dA/dAn

In fact, as we have seen, the assumed accusative feature receives no overt morphological form in such contexts, as (29) below shows explicitly. Here we see that attempting to include the accusative *-nI* in the relevant position is ungrammatical. This is a puzzle for what I have proposed so far: if oblique case structures indeed contain accusative case, the typical accusative morpheme ought to be able to occur inside of the oblique marker when the possessive marker is not present to trigger use of the accusative allomorph *-n*.

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

a. kitab tepse-(*ni)-de turadı
book table-(ACC)-LOC stands
'A book is on the table'

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

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

d. fatima-ʁa pismo zaščık-(*nı)-dan keldi
fatima-DAT letter boy-(ACC)-ABL came
'A letter came to Fatima from the boy'

I suggest that the realization of ACC in Balkar is governed by the three ordered VI rules in (30):

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

a. ACC ↔ -n / [3POSS __]

b. ACC ↔ -∅ / [__ OBL]

c. ACC ↔ -nI / elsewhere

First the rule in (30a) is attempted, which will realize ACC as *-n* if 3POSS is present. If (30a) cannot apply, then (30b) is attempted, which assigns ACC a null exponent if OBL is present. If both (30a) and (30b) fail to apply, the elsewhere rule in (30c) is then triggered, which realizes ACC as *-nI*.

It is worth asking why these VI rules are ordered in this way.[10] In Distributed Morphology, it is often hypothesized that more specific rules take precedence over more general ones. This is why, for instance, a context-sensitive VI rule is selected over a default rule (yielding what we call allomorphy) when the right context is present: the VI rule that defines a specific context of application is more specific than a default rule. Given these considerations, it is natural that the VI rules in (30a) and (30b) take precedence over the default rule in (30c). The issue is how to ensure that the rule in (30a) is attempted before that in (30b). This result would emerge as desired if it is possible to identify some other syntactic feature that the rule in (30a) might be making reference to: if the context for (30a) involves (at least) two features, then it will necessarily take precedence over the rule in (30b) when possible, since (30b) is sensitive to just one feature. For this purpose, we might take advantage of the proposal that accusative case contains nominative case, and say that the rule in (30a) should in fact be stated as in (31):

(31) *A revised VI rule for accusative -n*
ACC ↔ -n / [3POSS NOM __]

VI rules that specify multiple features for their context of application are argued for by Moskal and Smith (2016). It is possible that the relevant additional feature is not the nominative one per se, but rather some other feature present in the NP/DP.[11] The Balkar data do not point towards a more specific proposal about what this additional feature might be.

5. More Details about Oblique Cases: On Dative and the Relationship between Ablative and Locative

In this section, I discuss further facts about oblique cases in Balkar. First I address dative case, where accusative containment is not evident. I argue that this is due to a phonological factor. I then show that Balkar may provide evidence for a more articulated containment relationship between oblique cases, along the lines of Caha (2009).

5.1. The Lack of Containment in the Balkar Dative

Balkar has one other oblique case—dative. This case has at least two forms: *-nA* and *gA*.[12] The distribution of the two is in part phonologically determined, but some of the time they are in free variation, as in (32):

(32) *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'

Importantly, in the context of 3POSS the dative form *-nA* must be used (33):

(33) *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'

Since dative case is *-na* when 3POSS is present, given the above arguments about the containment of accusative by oblique cases, we expect the assumed accusative feature contained by dative case to be realized as *-n* here, yielding the possessed dative form *-(s)Inna*. This contains two adjacent instances of [n]. As (33) above shows, in fact we see the morphology *-(s)Ina*, which contains only a single [n]. Explicitly testing the form *-(s)Inna* received a negative judgment (34):

(34) *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/ as predicted, but that a phonological process reduces the /nn/ cluster to a single [n].

There is independent evidence for such a process from Balkar pronominal morphology. As (35) below shows, accusative/genitive plural pronouns in this language are simply built from the nominative (unmarked) form, with the addition of a suffix *-nI*. However, all the singular accusative/genitive forms involve the addition of only an element *-i* to the nominative form, though this is less clear for the 3rd person singular pronoun, which undergoes an alternation from *ol* to *a(n)*. The 1st and 2nd person singular forms are sufficient to make my point, however.

(35) *Balkar nominative and accusative/genitive pronouns*

	1SG	2SG	3SG	1PL	2PL	3PL
NOM	men	sen	ol	biz	siz	ala
ACC/GEN	men**i**	sen**i**	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 in (35) to posit that the first and second person singular pronouns in accusative / genitive case are underlyingly /men-nI/ and /sen-nI/, 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 independent evidence for my hypothesis that in dative NPs with 3POSS, the underlying form is /-(s)I-n-na/ as expected, but that the /nn/ cluster is reduced to [n] for phonological reasons.

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 the velar nasal [ŋ]. This modification in place of articulation eliminates the potential [nn] cluster:

(36) *Usual accusative -na incompatible with a /n/-final name*

alim surat-nɨ aslan-ŋa/*na berdi
alim picture-ACC aslan-DAT gave

'Alim gave the picture to Aslan'

As Smith et al. (2019) discuss, it is possible that not all oblique cases have exactly the same structure (a concept that is also relevant to Section 5.2 below). It is thus possible that the containment of accusative case by obliques is not universal. However, the hypothesis that the Balkar dative does contain the accusative leads us to suspect the influence of a phonological process which there are, luckily, two independent pieces of evidence for in Balkar. It is therefore reasonable to maintain the containment of accusative by dative case in this language.

5.2. Containment of Obliques

In this paper, I have assumed following previous literature that the various oblique cases (locative, ablative, dative) are manifestations of a single [OBL] node in the functional spine of the NP/DP (which, as argued, contains the accusative). It is conceivable that different oblique cases are distinguished by different sub-varieties of this feature, which we might call [OBL1] [OBL2] [OBL3] or [OBL_{LOC}] [OBL_{ABL}] [OBL_{DAT}] for concreteness, as I did in the VI rules in (22) above. However, another possibility is that the different obliques have different structures. Caha (2009) argues for the more complex case hierarchy in (37), in which some obliques are contained by others:

(37) *A more complex case hierarchy*
(Adapted from Caha 2009: p. 24, ex. 38)
[[[[[[NOM] ACC] GEN] DAT] INSTR] COM]

Caha (2013) presents a variation of this proposal, which also includes locative and ablative, based on facts about case syncretism in Classical Armenian:

(38) *Another more complex case hierarchy*
(Adapted from Caha 2013: p. 1018, ex. 4)
NOM - ACC - LOC - GEN - DAT - ABL - INST

The hierarchy in (38) places locative case quite low, between accusative and genitive. However, notice that if we interpret this hierarchy as reflecting a containment relationship, (38) states that locative is contained by ablative. Genitive and dative sit between them, though the relation of these cases to case containment proposals is debated: see discussion in Harðarson (2016); Smith et al. (2019); Starke (2017), and Davis (2021a). Balkar morphology is consistent with the general proposal that locative case is contained by ablative. In Balkar, the locative is *-dA*, and the ablative is *-dAn*, as shown once again in (39) below:

(39) *Locative is -dA, ablative is -dAn*

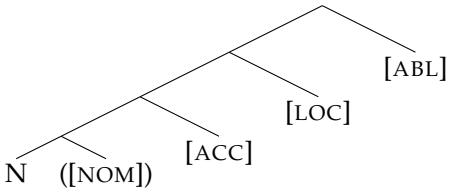
a. kitab šindig-de turadɨ
book chair-LOC stands
'A book is on a chair'

b. sabij-den qalʁanla barɨ-sɨ-da čai ištile
child-ABL besides all-3POSS-DAT tea drank
'Everyone besides the child drank tea'

These facts permit an analysis wherein the locative is *-dA*, and the ablative is *-n* (coincidentally like the accusative allomorph), which overtly contains the locative:

(40) *Ablative case contains locative*

a.



b. N ([NOM]) ACC LOC ABL
N -∅ -∅ -dA -n

Thus, Balkar potentially has yet another instance of surface-evident case containment.

If we are to take seriously the idea that there is a containment relationship between the various oblique cases, then other questions arise about what we might expect to see in Balkar. Following the hierarchy in (38), for instance, we predict the possibility of dative morphology being contained by the ablative case. This and additional similar predictions we might draw from these more granular hierarchies are not correct for Balkar. Thus, overall, adopting a relatively simplified case hierarchy that does not structurally distinguish the various obliques is most natural for this language (which would entail that the resemblance between ablative and locative here is a coincidence). While works like Caha (2009, 2013) have reasons for positing more complex case hierarchies, the facts about Balkar do not allow us to probe this issue more deeply. Since morphology is subject to considerable cross-linguistic idiosyncrasy, we do not expect every language to realize syntactic structures in the same way. Furthermore as I discuss in Section 7 below, there is likely an independent reason why overtly realizing containment structures is a marked option, which would make the presence of more articulated case hierarchies all the more difficult to detect.

6. On Genitive Syncretism in Balkar and Beyond

Earlier in this paper, I assumed that the usual syncretism of accusative and genitive case as *-nI* in Balkar is accidental, since these two cases pattern differently with regard to allomorphy, and since only accusative appears to be contained by oblique cases. I have therefore tacitly assumed throughout this paper that genitive does not participate in case containment in Balkar. While the status of genitive in case containment theories is controversial as mentioned above, we saw in (37–38) that Caha does indeed place genitive in the hierarchy, near accusative. Davis (2021a) makes a similar proposal based on the occasional syncretism and general morpho-phonological similarity of accusative and genitive in Buryat (Mongolic).

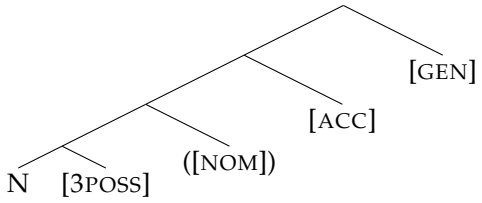
There is cross-linguistic evidence that accusative-genitive syncretism is well-attested. Such syncretism is rare as a language-wide phenomenon, as Baker (2015) notes, citing Lander (2008) for the statement that only Balkar and Martuthunira have it.[13] However, at least some syncretism of genitive with accusative (among other cases) is not rare in of itself.[14] As pointed out by a reviewer, Baker notes that partial syncretism of accusative and genitive is common in the Slavic family, and Baerman et al. (2005) report the presence of accusative-genitive syncretism in the languages just mentioned as well as Finnish.[15] Another reviewer notes that genitive is often syncretic with accusative in Uzbek (see data in Gribanova 2013), and that the usually null genitive case in Sakha is realized like accusative case in possessed contexts (Baker and Vinokurova 2010).

Since there is a systematic (though variably attested) cross-linguistic relationship between accusative and genitive morphology, it is reasonable to wonder whether the usual syncretism of these cases in Balkar is really an accident, as I have done here. Davis (2021a) argues that in Buryat, at least, these cases are different realizations of the same underlying syntactic element, and thus posits that genitive has the same position as accusative in the case hierarchy (since they are not structurally distinct). In a similar vein, Caha (2010) argues that in Vlakh Romani, Kazakh, Wakhi, and West Tocharian, there is evidence that genitive

case contains the accusative, as shown in the more articulated hierarchies in (37) and (38) above, respectively from Caha (2009) and Caha (2013). Caha's specific proposals about how this hierarchy determines the morphological relationship between accusative and genitive case cannot be straightforwardly summarized here, since Caha adopts a morphological framework that depends on very different axioms (*Nanosyntax*, Starke 2009, a.o.). In Balkar, if genitive case in fact contained the accusative, then in possessed genitive NPs with 3POSS we would expect the following hypothetical structure and corresponding morphological forms, which would include the accusative allomorph *-n* inside of the genitive *-nI*:

(41) *Hypothetical containment of accusative by genitive in Balkar*

a.



b. N 3POSS (NOM) ACC GEN
N -(s)I -∅ -n -nI

Such forms are not attested in Balkar. However, notice that the resulting hypothetical form would contain an [nn] cluster: N-(s)I-n-nI. As discussed in Section 5.1 above, there is independent evidence that Balkar does not permit such sequences. It is therefore possible that genitive case in Balkar does contain the accusative, but that Balkar phonology prevents us from seeing the [nn] sequence that would make this evident, precisely as I argued for dative case. Since it is difficult to prove that this is so, and because the morpho-syntactic relationship between accusative and genitive is complex, I will not resolve this puzzle decisively here.

7. Why Overt Case Containment Is Not Typical

If case containment (perhaps with some variations in the underlying hierarchy) is cross-linguistically universal, it is worth asking why surface-evident case containment is not a typical state of affairs. While it is indeed attested, it is clearly a relatively marked method of expressing case. There are a few concepts from previous research in morpho-syntax which lead us to expect that surface-evident case containment should indeed be relatively uncommon. In Distributed Morphology, there is no obligation for all syntactic terminals to be morphologically expressed. It is routine for analyses using this theory to posit that many nodes in a structure lack a corresponding VI rule (or are expressed via the null morpheme ∅). Importantly, a number of works have pursued some version of the hypothesis that morphology in fact prefers to express syntactic structures with the least number of morphemes possible, given the VI rules available in the language in question.

Pesetsky (2013) argues (chiefly in the context of Russian) for the following morphological rule, which would prevent the appearance of multiple case morphemes:

(42) *The One-Suffix Rule* (Pesetsky 2013, p. 11, ex. 7)
Delete all but the outermost case suffix.

Assuming case containment, nominative case simply corresponds to a single node [NOM], to which the the One-Suffix Rule is not applicable. However, accusative case structurally corresponds to the features [NOM ACC], but the One-Suffix Rule will not allow both of these case features to be independently expressed: rather, ultimately only [ACC] can be expressed in this structure. Similarly, in an oblique structure, though the case nodes [NOM ACC OBL] are by hypothesis all present, only the outermost node [OBL] will actually be morphologically expressed if the One-Suffix Rule applies. In contrast, in a language where the One-Suffix Rule does not apply (or is perhaps violable), there would indeed be the potential for surface-evident case containment.

The cross-linguistic tendency against surface-evident case containment could also be explained in terms of a requirement to efficiently express the content of syntactic structures. Embick and Marantz (2008) argue (building on previous observations) that when it is possible for a structure to be expressed either by a multi-word/morpheme form, or by a single word/morpheme, the latter option must be selected. In a similar vein, Siddiqi (2009) argues for the principle of *Minimize Exponence*, which states that a syntactic structure must be morphologically expressed by as few morphemes as possible. Haugen and Siddiqi (2016) make use of this principle in the context of a theory where multiple adjacent terminal nodes can be expressed simultaneously by one morpheme—an operation termed *spanning* (Bye and Svenonius 2012; Merchant 2015; Svenonius 2016). If it is possible for one morpheme to express multiple terminals at the same time (provided that its VI rule is defined appropriately), then *Minimize Exponence* will prefer morpho-syntactic derivations where all of the case nodes present in a given nominal structure are expressed by a single morpheme if possible. For instance, the schematized VI rules in (43) below describe a grammar where nominative, accusative, and oblique cases are each expressed by a single morpheme, despite case containment. The morpheme X expresses the nominative node alone, while the morpheme Y expresses the nominative and accusative nodes together (yielding what is termed accusative morphology), whereas the morpheme Z expresses the nodes for nominative, accusative, and oblique case all together (yielding what is called oblique morphology).

(43) *A schema for VI rules for case in a language without overt case containment*

a. X ↔ NOM

b. Y ↔ NOM ACC

c. Z ↔ NOM ACC OBL[16]

A similar result is argued for by Caha (2009) under different morphological assumptions. The Nanosyntax framework Caha adopts allows one morpheme to express multiple terminals by being inserted into non-terminal positions which dominate multiple heads. Caha argues that most case morphemes simultaneously express all case nodes present via this process. This contrasts with *spanning* approaches, which do not allow morpheme insertion at non-terminal positions, but yield similar results by allowing one morpheme to "stretch" across multiple terminals. Most importantly, if there really is a *Minimize Exponence* principle, then regardless which of these mechanisms is assumed, the possibility of expressing multiple case nodes with just one morpheme will lead to a tendency for languages to not individually express each node in case containment structures.

As Haugen and Siddiqi (2016) discuss, a principle like *Minimize Exponence* is implicit in much research, but somewhat controversial. If this principle were universal, surface-evident case containment would never be possible. However, it does not seem that *Minimize Exponence* can be universal anyway. Davis (2021a) makes this point using facts from Barguzin Buryat (Mongolic). In this language, it is possible for accusative (or genitive) case and the plural to be expressed together as a single portmanteau morpheme (44a), but it is also possible for them to be expressed via separate morphemes (44b):

(44) *Accusative/plural portmanteau versus multi-morphemic form in Barguzin Buryat*

a. *Single morpheme portmanteau form* (Davis 2021a, ex. 23a)

bi buuza-nuuʃa ədʲəəb
1SG dumpling-PL2.ACC ate

'I ate dumplings'

b. *Multi-morphemic form* (Davis 2021b, ex. 22b)

bi buuza-nuud-iijə ədʲəəb
1SG dumpling-PL1-ACC eat

'I eat dumplings'

Thus, while the *Minimize Exponence* principle may describe a general tendency in human language to express syntactic structures with fewer morphemes, this cannot be a universal rule. From this perspective, it is not surprising that surface-evident case containment is uncommon, but attested.

8. Concluding Remarks

A variety of recent works in morpho-syntax have argued for a case containment hierarchy, based on cross-linguistic facts about phenomena such as suppletion and syncretism. I have argued that an aspect of Balkar grammar, involving the allomorphy of accusative case in certain possessive contexts, provides transparent evidence that oblique cases contain the accusative. Specifically, I have proposed that we achieve a simple analysis of an otherwise idiosyncratic pattern in Balkar if we adopt the view that accusative case is a sub-part of oblique cases—a result that converges with a great deal of recent work on the syntactic structure of case. This result is clear in the locative and ablative cases, but not dative. I argued that this difference can be attributed to an independent phonological confound. The majority of this paper assumed that the usual syncretism of accusative and genitive in Balkar is an accident. Since there is a clear cross-linguistic relationship between accusative and genitive morphology, I also discussed how we might incorporate genitive case into the hierarchy in a way that is compatible with this paper's arguments. Finally, I proposed that independent morphological factors are responsible for the fact that overt case containment is not default in human language. Nevertheless, a growing body of work shows that it is attested, as I have argued here for Balkar.

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Abbreviations

ABL = ablative, ACC = accusative, DAT = dative, LOC = locative, NOM = nominative, PL = plural, POSS = possessive, SG = singular, 1 = first person, 2 = second person, 3 = third person

Notes

1 Several of the works cited here discuss case containment in terms of the *dependent case* theory of Marantz (1991), which involves an alternative ontology of case categories. Smith et al. (2019), for instance, argues that this theory's categories connect usefully to facts about phenomena such as case-driven suppletion. Since this theory is not relevant for this paper, here I maintain more neutral terminology—nominative, accusative, et cetera.

2 The capitalized letters in these morphemes represent under-specified vowels that harmonize depending on the surrounding phonological context. See Section 3 for discussion of Balkar vowel harmony. Balkar uses a Cyrillic-based orthography, but for convenience I transliterate it using the International Phonetic Alphabet with the following substitutions: /y/ = ü, /ø/ = ö, /ʃ/ = š, [ʧ] = č.

3 This generalization is designed to rule out the possibility of what the literature calls "ABA" patterns. The term ABA describes a paradigm in whose first cell no special morphological rule applies (yielding a default form A), in whose second cell an allomorphy/suppletion rule can be triggered (yielding form B), and in whose third cell the triggering of that rule unexpectedly fails (thus the default form A re-emerges). The works just cited argue that ABA patterns are unattested due to generally being superseded by ABB patterns, for reasons relating to the way that morphological rules interact with syntactic containment. Davis (2021a) and Middleton (2020, 2021) both argue, respectively using facts about plural suppletion and pronominal suppletion, that when a single morpheme expresses multiple syntactic nodes in portmanteau fashion exceptional ABA patterns can and do occur. When portmanteau morphology is not at issue, however, we expect the generalization in (5) to hold.

[4] The object 'mouse' in (10b) lacks accusative case marking. Balkar is a *differential object marking* language, like many other Turkic languages, in which some objects are not case marked. Since such nouns lack case, I do not analyze them here.

[5] The third person possessive agreement marker *(-s)I* contains the harmonizing /I/, and also has an initial /s/ only when affixing to an element that ends in a vowel. Altogether then, this morpheme can be realized in the following eight different ways: [-i], [-ü], [-ɨ], [-u], [-si], [-sü], [-sɨ], [-su].

[6] If we instead suppose that these examples involve an alternation that causes 3POSS to be realized as *-(s)In*, it would be necessary to stipulate that accusative case happens to be null in this context. This analysis would still be consistent with the core arguments of this paper. Since the process that results in *-(s)In* occurs both in accusative as well as locative and ablative contexts (as we will see shortly), it would be sufficient to claim that the presence of accusative case in the underlying structure triggers *-(s)In* in both typical accusative environments, and in locative/ablative ones, since oblique cases contain accusative.

[7] The examples in (14) each show both a consonant final and vowel final noun, since these involve slightly different forms of the possessive suffix (an initial vowel appearing on the suffix in the former context). There proved to be no relevant difference in the behavior of these variants.

[8] While the examples of (21) do not attempt amelioration via nasal assimilation of the relevant [n], no assimilation would occur anyway in examples (b), (d), (f) and (h), which are nevertheless unacceptable.

[9] For arguments for the phase-hood of nominal phrases see Bošković (2016), Davis (2021b), and references therein.

[10] Though it is possible that VI rule ordering is simply a feature of the system: the original arguments for Distributed Morphology in Halle and Marantz (1993) make use of stipulated VI rule ordering at several points.

[11] This would be necessary if we take seriously the hypothesis discussed above that nominative case is not actually present in the morpho-syntactic representation. As discussed above, however, this analysis of Balkar is not in fact dependent on that hypothesis, since as Moskal and Smith (2016) discuss allomorphy is in principle possible even without strict adjacency.

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

[13] As we see in this paper, it is not true that accusative-genitive syncretism applies throughout Balkar grammar, since the two come apart in possessed contexts. Nevertheless, the two are indeed otherwise syncretic in Balkar.

[14] I thank my reviewers for bringing this point to my attention.

[15] Baerman et al. (2005) also mention that accusative is syncretic with dative in Eastern Armenian, Ngiyambaa, and Phalura, and that accusative, genitive, and dative are all syncretic in Bonan.

[16] Of course, it is necessary to morphologically distinguish the different oblique cases. As discussed in Section 5.2 above, we can define different varieties of the [OBL] feature in order to achieve this.

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