The Morpho-Phonology of Accusative and Genitive Case in Barguzin Buryat

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1 Introduction

In this paper, I explore an aspect of case morpho-phonology in the Barguzin dialect of Buryat (Mongolic, Russia), based on my fieldwork with this language. As is typical of "Altaic" languages, Buryat is agglutinative, suffix-heavy, and has a NOM-ACC case system. Most of its nominal suffixes, including its case suffixes, are uncomplicated. Nominative case is systematically null, as we see in (1) below:[1]

(1) **Nominative case**

a. *tumɔn-∅ buuza-nɯɯd-iijɔ ɔdʲ ɔɔ*
Tumen-NOM buuzy-PL-ACC ate
'Tumen ate buuzy (a type of dumpling)'

b. *stakan-∅ ɔmdɔrɔɔ*
glass-NOM broke
'The/a glass broke'

c. *ʒɔmɔs-∅ amtatai*
Berry-NOM delicious
'Berries are delicious'

This language also has a full array of oblique cases. These are all instantiated by straightforward suffixes that have no morpho-phonological idiosyncrasies. Many suffixes in this language, including several oblique cases, are subject to vowel harmony—a process which is pervasive, but not important for this paper.[2]

(2) **Some oblique cases**

a. *bi miisgɔi-nuud-tɔ mʲ axa ɯgɵɵb*
1SG cat-PL-DAT meat gave
'I gave meat to the cats'

b. *bi noxoi-χoo ainab*
1SG dog-ABL be.afraid.of
'I'm afraid of the dog'

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[1] I use the following abbreviations: ABL = ablative case, ACC = accusative case, COM = comitative case, DAT = dative case, GEN = genitive case, INST = instrumental case, NOM = nominative case. This paper adopts the transliteration system used in Tatevosov et al. (To appear), which is an IPA-based representation of the original Cyrillic Buryat orthography. In careful speech the diphthongs transliterated as ⟨ei⟩, ⟨ɔi⟩, ⟨oi⟩ and ⟨ai⟩ are pronounced as expected following the IPA. In more natural speech, the first three diphthongs are simplified to [e:], and the latter to [ɛ:].

[2] It is only necessary to be aware of the harmonizing low vowel /A/, which is realized as /a/, /ɔ/, or /o/, depending on the phonological properties of the stem that it affixes to.

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c. *bi badm-aar omogorxonob*
1SG badma-INST be.proud.of
'I'm proud of Badma'

The topic of this paper is the realization of accusative and genitive case in this language, which is considerably more complex than that of its other cases. The following table previews (most of) the possible forms of these cases. While this is a large set of possible forms, which are essentially in free variation, notice that there is a systematic relatedness between the forms of accusative and genitive:

(3) **Manifestations of accusative and genitive in Barguzin Buryat**

ACC	-jɔ	-Aijɔ	-iijɔ	-Ai	-ii
GEN	-n	-Ain	-iin	-Ai	-ii

As I describe in the next section, there is a phonological generalization about the distribution of these forms. To preview, the analysis I will provide is as follows: Fundamentally, accusative marking is /jɔ/, while genitive marking is /n/. These cases are members of a morpho-syntactic natural class in Barguzin Buryat (following Davis 2021), and as such are both subject to particular phonological requirement:

(4) **The phonological requirement for accusative and genitive in Barguzin Buryat**
The accusative /jɔ/ and genitive /n/ must always be adjacent to a V$\mu\mu$.

I propose that when this requirement is not trivially satisfied by the phonology of the noun stem, an additional "epenthetic" element, realized as /Ai/ or /ii/, is inserted in order to meet it. This proposal is similar in essence to the analysis of certain Basque and Italian facts in Arregi & Nevins (2012), who argue that these languages sometimes recruit dedicated epenthetic morphemes to satisfy phonological alignment requirements. More generally, these findings add to the body of evidence that the morphological and phonological components of the grammar closely interact (McCarthy & Prince 1998; Wolf 2008, 2009; Pertsova 2015; Davis 2019, a.o.). However, the analysis previewed above does not account for all accusative and genitive forms, as I will show.

2 The phonological generalization

Some of the time, accusative marking is /jɔ/, and genitive marking is /n/. I mention these two forms together in this way for a reason: they both occur under the same conditions. Specifically, these forms of accusative and genitive marking are permitted when following a noun stem ending in either a long vowel or diphthong—put more abstractly, a bi-moraic segment (V$\mu\mu$).

(5) **Accusative /jɔ/ following V$\mu\mu$**

a. *bi ɔʒii-jɔ xaranaab*
1SG mother-ACC saw
'I saw mother'

b. *sajana xara miisgɔi-jɔ xaraa*
Sayana black cat-ACC saw
'Sayana saw a black cat'

c. *dugar noxoi-jɔ xarana*
Dugar dog-ACC see
'Dugar sees a dog'

d. *bi tax^{j}aa-jɔ xaraab*
1SG chicken-ACC see
'I see a chicken'

e. *bi ʒodoo-jɔ xaraab*
1SG fir.tree-ACC see
'I see a fir tree'

(6) **Genitive /n/ following V$\mu\mu$**

a. *ɔʒii-n miisgɔi bʉdʉʉn*
mother-GEN cat fat
'Mother's cat is fat'

b. *miisgɔi-n ɔdʲɔn*
cat-GEN food
'cat food'

c. *noxoi-n xool ʉntɔi*
dog-GEN food expensive
'Dog food is expensive'

d. *oi-n ʃʉbʉʉ-d χaixan*
forest-GEN bird-PL beautiful
'The forest's birds are beautiful'

In many other contexts, we see these same suffixes, along with some additional material. For instance, when the nominal stem ends in a consonant, we see what appears to be an extra element intervening between the noun and the case suffix, as (7) below shows. This extra element is realized as either /Ai/ or /ii/. Most of the time, either form is allowed. I gloss this element as EM for "epenthetic morpheme":[3]

(7) **Accusative / genitive with obligatory epenthetic morpheme**

a. *bog-*(oi)-n ʉngɔ boro*
trash-EM-GEN color grey
'The trash's color is grey'

b. *bi bog-*(ii)-jɔ xaranaab*
1SG trash-EM-ACC saw
'I see a piece of garbage'

c. *dugar-*(ai/ii)-n miisgɔi bʉdʉʉn*
Dugar-EM-GEN cat fat
'Dugar's cat is fat'

d. *bi dugar-*(ai/ii)-jɔ xaranaab*
1SG Dugar-EM-ACC saw
'I saw Dugar'

e. *ail-*(ai/ii)-n miisgɔi bʉdʉʉn*
family-EM-GEN cat fat
'The family's cat is fat'

f. *bi ail-*(ai/ii)-jɔ xaranaab*
1SG family-EM-ACC saw
'I saw the family'

Something similar happens when an accusative / genitive morpheme attempts to suffix to a noun that normally ends in a short vowel. Before I show the fact, note the following phonological process: In Barguzin Buryat, when a short vowel is adjacent to a bi-moraic segment, the short vowel is deleted:

(8) V$\mu \rightarrow \varnothing$ / __ V$\mu\mu$
(Staroverov & Zelensky To appear, ex. 20)

a. ***wolf* + ablative**
/ʃono + aan/ → ʃonøaan → [ʃonaan]

[3] With some nouns, only one of /Ai/ or /ii/ seems to be permitted, but as far as I can tell there is no clear generalization about what determines this. Since there is quite a bit of optionality in Barguzin Buryat nominal morphology, it is possible that some of the observed restrictions were superficial inconsistencies in speakers' judgments. Further fieldwork would be necessary to know more.

b. ***leaf* + instrumental**
/nabʃa + aar/ → nabʃ~~a~~aar → [nabʃaar]

When accusative or genitive marking suffixes to noun that normally ends in a short vowel, we see the emergence of /Ai/ or /ii/ once again. Since either one of these intervening elements is a V$\mu\mu$, the short vowel deletion process mentioned above applies, removing the final vowel of the nominal stem:

(9) **Short vowel deletion caused by epenthetic morpheme**

a. *badma* → *badm-ai/ii-jɔ*
Badma Badma-EM-ACC

b. *badma* → *badm-ai/ii-n*
Badma Badma-EM-GEN

c. *ʃono* → *ʃon-oi/ii-jɔ*
wolf wolf-EM-ACC

d. *ʃono* → *ʃon-oi/ii-n*
wolf wolf-EM-GEN

e. *tarxi* → *tarx-ai/ii-jɔ*
head head-EM-ACC

f. *tarxi* → *tarx-ai/ii-n*
head head-EM-GEN

g. *ɔgɔʃɔ* → *ɔgɔʃ-ɔi/ii-n*
sister sister-EM-GEN

To summarize, the facts I analyze here are as follows: The accusative /jɔ/ and genitive /n/ straightforwardly affix to nouns ending in a segment V$\mu\mu$. When the noun ends in anything else (a consonant or short vowel), an intervening element /Ai/ or /ii/ appears (triggering predictable short vowel deletion if applicable). Importantly, because /Ai/ and /ii/ are both V$\mu\mu$ segments, we can make the following generalization about accusative / genitive marking:

(10) **Phonological generalization about accusative and genitive in Barguzin Buryat**
The accusative /jɔ/ and genitive /n/ are always adjacent to a V$\mu\mu$.

I will use this generalization as the basis for my analysis in the next section. To conclude this section, note that the /Ai/ or /ii/ that we have seen occurring in some accusative / genitive forms cannot appear with any other cases (nominative or oblique):

(11) **No /Ai/ or /ii/ with nominative**

a. *tumɔn-∅-*ɔi/*ii buuza-n~~uu~~d-ii-jɔ ɔd^{j}ɔɔ*
Tumen-NOM-EM buuzy-PL-EM-ACC ate
'Tumen ate buuzy'

b. *stakan-∅-*ii/*ai ɔmdɔrɔɔ*
Glass-NOM-EM broke
'The/a glass broke'

c. *ʒɔmɔs-∅-*ii/*ɔi amtatai*
Berry-NOM-EM delicious
'Berries are delicious'

(12) **No /Ai/ or /ii/ with oblique cases**

a. *bi gɔr-*ɔi/*ii-tɔ jɔrɔɔb*
1SG house-EM-DAT came
'I came to the house'

b. *bi dugar-*ai/*ii-(g)aan ainab*
1SG Dugar-EM-ABL be.afraid.of
'I am afraid of Dugar'

c. *bi dugar-*ai/*ii-tai magazin oʃoob*
1SG Dugar-EM-COM store went
'I went to the store with Dugar'

d. *bi miisgɔi-*gɔi-(g)ɔɔr omogorxonom*
1SG cat-EM-INST be.proud.of
'I am proud of the cat'

Therefore it is clear that whatever is responsible for the arising of this element is only relevant for accusative and genitive cases.[4]

3 Proposal: Epenthesis to satisfy alignment

We have seen that accusative and genitive case in this language obey a particular phonological generalization. I will interpret this as evidence that these case morphemes are subject to an Optimality Theoretic alignment constraint (McCarthy & Prince 1993, 1998), which I state as follows:

(13) **ALIGN(V$\mu\mu$-ACC/GEN)**
Assign a * when an ACC/GEN suffix is not aligned to the right edge of a V$\mu\mu$ segment.

It fits the facts to define this alignment constraint as applying only to accusative and genitive cases, since this language's other cases have no special alignment requirement. It is worth wondering why only these two cases, and no others, pattern in this way. In Davis (2021), I argue that these two cases in Barguzin Buryat are members of a natural class that excludes the other cases, drawing from the intuition of work on *case containment* (Caha 2009; Smith et al. 2019, a.o.). In that article, I focus on the fact that accusative and genitive case in Barguzin Buryat can uniquely undergo a particular suppletion process in plural contexts, which assigns them both the syncretic form *-nuuʃA*:

(14) **Syncretic plural suppletion for accusative and genitive**
(Davis 2021, ex. 6)

a. *bi miisgɔi-n~~ɯɯ~~ʃɔ xaranab*
1SG cat-PL.ACC see
'I see cats'

b. *miisgɔi-n~~ɯɯ~~ʃɔ χ~~ɯɯ~~l-n~~ɯɯ~~d uta*
cat-PL.GEN tail-PL long
'The cats' tails are long'

If the morpho-phonological component of this language's grammar groups these cases together in a salient way, it is easy to describe the fact that they are both uniquely subject to a particular alignment constraint (13) and a particular (optional) suppletion process (14). Since the method of bundling these cases in Davis (2021) depends on theory-internal concepts that are not relevant to this paper, here I will proceed by simply referring to the two in tandem as "ACC/GEN".[5]

Next let's proceed to the analysis. The constraint defined above is automatically satisfied when the noun inherently ends in a V$\mu\mu$ segment as we saw in section 1, as (15) below shows again:

[4] The /g/ in parentheses in (12b) and (12d) would be expected if the epenthetic morpheme were used in these contexts, due to the phonological constraint demonstrated in (21) below.

[5] Specifically, in Davis (2021) I bundle together accusative and genitive case in Barguzin Buryat as manifestations of "dependent case", following the case ontology of Marantz (1991) and much following work. Marantz's case categories are convenient for Davis (2021) due to their adoption in several relevant works on case containment and the typology of case morphology (Zompì 2017; Smith et al. 2019, a.o.).

(15) **Automatic satisfaction of the alignment constraint**

a. *bi ɔʒii-jɔ xaranaab*
1SG mother-ACC saw
'I saw mother'

b. *ɔʒii-n miisgɔi bʉdʉʉn*
mother-GEN cat fat
'Mother's cat is fat'

c. *sajana xara miisgɔi-jɔ xaraa*
Sayana black cat-ACC saw
'Sayana saw a black cat'

d. *miisgɔi-n ɔdʲɔn*
cat-GEN food
'cat food'

However, if the noun ends in any other sort of segment, this constraint is violated. As previewed above, I argue that violation of ALIGN(V$\mu\mu$-ACC/GEN) is avoided by insertion of an epenthetic element, which is realized as /Ai/ or /ii/. Note that Barguzin Buryat does have a typical process of phonological epenthesis: Consonant clusters at morpheme boundaries are broken up by insertion of /A/.

(16) **/A/ epenthesis to break up CC at morpheme boundaries**
(Staroverov & Zelensky, ex. 24)

a. */xatar-dag-bdi/* → *[xatar-a̲-dag-a̲-bdi]*
dance-HAB-1PL

b. */nʲ ʉʉr-mnʲ i/* → *[nʲ ʉʉr-a̲-mnʲ i]*
face-1SG.POSS

c. */nom-tnai/* → *[nom-o̲-tnai]*
book-2SG.POSS

Epenthesis of /Ai/ or /ii/ never occurs simply to break up clusters at morpheme boundaries, and /A/ epenthesis is never recruited to satisfy the constraint in (13) above. These facts are captured by my Optimality Theoretic analysis, which is demonstrated by the tables in (17) and (18) below.

The input to (17) is a consonant-final noun and an accusative or genitive suffix. Here ALIGN(V$\mu\mu$-ACC/GEN) and *C+C (which bans CC clusters that span morpheme boundaries) are un-dominated.[6] Below these is DEP(Ai/ii), which outranks DEP(A). While DEP(A) is the lowest ranked here, violating DEP(A) cannot satisfy ALIGN(V$\mu\mu$-ACC/GEN). Only a violation of DEP(Ai/ii) can achieve this, as the optimal candidate (17c) shows. When ALIGN(V$\mu\mu$-ACC/GEN) is not relevant, the lowest ranked constraint DEP(A) will be violated to satisfy *C+C as in (16) above.

(17) *Consonant-final noun + accusative or genitive suffix*

dugar-n/jɔ	*C+C	V$\mu\mu$-ACC/GEN	DEP(Ai/ii)	DEP(A)
a. dugar-n/jɔ	*	*	✓	✓
b. dugar-a-n/jɔ	✓	*	✓	*
⟶ c. dugar-ai/ii-n/jɔ	✓	✓	*	✓

In contrast, the input to the table in (18) below involves a noun ending in a short vowel. This table is similar to that in (17), but includes *VμV$\mu\mu$ (which penalizes a short vowel adjacent to a V$\mu\mu$) as well as MAX(Vμ). *VμV$\mu\mu$ is undominated, and due to out-ranking MAX(Vμ), it motivates deletion of the noun's final short vowel when DEP(Ai/ii) is violated to satisfy ALIGN(V$\mu\mu$-ACC/GEN).

[6] In the following tables I abbreviate ALIGN(V$\mu\mu$-ACC/GEN) as V$\mu\mu$-ACC/GEN.

(18) *Short-vowel-final noun + accusative or genitive suffix*[7]

badma-n/jə	*VμVμμ	*C+C	Vμμ-ACC/GEN	DEP(Ai/ii)	DEP(A)	MAX(Vμ)
a. badma-n/jə	✓	✓	*	✓	✓	✓
b. badma-a-n/jə	✓	✓	*	✓	*	✓
c. badma-ai/ii-n/jə	*	✓	✓	*	✓	✓
→ d. badm-ai/ii-n/jə	✓	✓	✓	*	✓	*

I show no table for examples where the noun inherently ends in a Vμμ as in (15) above, since in such examples ALIGN(Vμμ-ACC/GEN) is trivially satisfied.

A few questions remain. What exactly is the identity of this epenthetic element /Ai/-/ii/? It is possible that this is the realization of some feature / functional head in the DP, though no facts I am aware of facilitate a specific proposal about this.[8] Another question is why the form of this epenthetic element is variable (/Ai/ or /ii/). I must leave this question unanswered here. However, there are additional facts described in section 4 below where /Ai/ and /ii/ do not pattern the same, which may point towards a future solution.

3.1 *Against a deletion analysis.* We might speculate that this piece realized as /Ai/ or /ii/ is not a separate morpheme, but rather an inherent part of accusative / genitive morphology that sometimes deletes. Here I will argue against such an analysis. Under a deletion analysis, the underlying forms of accusative morphology would be /-Aijɔ, -iijɔ/, and the underlying forms of genitive morphology would be /-Ain, -iin/. Under such an analysis, it is necessary to assume that when one of these morphemes affixes to a noun ending in a consonant, affixation proceeds straightforwardly as in (19a), and that when the noun ends in a short vowel, predictable deletion of that vowel occurs (19b).

(19) **Assumption #1 of a deletion analysis**

a. */nom + Ain/ → [nom-oin]*
book GEN book-GEN

b. */ʃono + Aijɔ/ → [ʃon-oijɔ]*
wolf ACC wolf-ACC

This analysis of forms like those in (19) is unproblematic. However, under such an analysis it is necessary to assume that when affixing to a noun that ends in a Vμμ segment, the /Ai/ or /ii/ sub-part of the accusative or genitive suffix deletes, as in (20):

(20) **Assumption #2 of a deletion analysis**

a. */taxʲaa + Aijɔ/ → taxʲaa-~~Aíjɔ~~ → [taxʲaa-jɔ]*
chicken ACC chicken-ACC chicken-ACC

b. */miisgɔi + Ain/ → miisgɔi-~~Aín~~ → [miisgɔi-n]*
cat GEN cat-GEN cat-GEN

[7] Violating DEP(A) to place /A/ next to the noun's final vowel in (18) does not satisfy Vμμ-ACC/GEN, as (18b) shows. However, this would satisfy Vμμ-ACC/GEN if adjacent short vowels could be coalesced into a long vowel. A faithfulness constraint like UNIFORMITY (McCarthy & Prince 1995) will prevent this, but I omit this from (18) for simplicity.

A reviewer mentions that two other potential candidates are relevant here: One that lengthens the final vowel of the noun stem, and one that adds an [i] in order to create /Ai/, which we know is an appropriate "epenthetic" diphthong. A highly ranked constraint such as IDENT(Length) will properly eliminate the first possibility. The second possibility could be ruled out by a constraint like UNIFORMITY, though this issue raises the question of how /A/+/i/ sequences are generally handled in the language—something which is unfortunately not clear to me based on the available data.

[8] I am aware of two reasonable possibilities. One is that /Ai/-/ii/ is a special realization of a functional head like *n* (Marvin 2003; Embick & Marantz 2008; Embick 2010). Another is that this is the realization of a case feature—a possibility made especially salient by the *case containment* approach adopted in my analysis of Barguzin Buryat suppletion in Davis (2021). In Caha (2009), for instance, genitive case structurally contains accusative case, which in turn contains nominative case, meaning that both genitive and accusative contain a nominative feature. Such a feature could be what is spelled-out as /Ai/-/ii/ (though evidently only when the needs of alignment require it).

Importantly, this second necessary assumption does not fit the facts about how Barguzin Buryat actually handles potential sequences of two adjacent V$\mu\mu$ segments. In reality, it is not the case that one of the V$\mu\mu$ segments is deleted. Rather, the epenthetic consonant /g/ is inserted between them:[9]

(21) $\varnothing \rightarrow$ /g/ / V$\mu\mu$ ___ V$\mu\mu$
(Staroverov & Zelensky, ex. 21)

a. ***gun* + instrumental**
/buu + aar/ $\rightarrow$ [buugaar]

b. ***chicken* + ablative**
/tax^{j}aa + aan/ $\rightarrow$ [tax^{j}aagaan]

c. ***happiness* + comitative + instrumental**
/bajar + tai + aar/ $\rightarrow$ [bajartaigaar]

Since a deletion analysis for Barguzin Buryat acccusative and genitive case morpho-phonology requires positing an exceptional deletion process that is not actually attested in the language, we have reason to be suspicious of such an analysis.[10] However, the epenthesis analysis that I have proposed above does not have this problem.

3.2 *Is epenthesis the only possible analysis?* While I argue that an epenthesis analysis is superior to a deletion one, the facts could also be accounted for by positing that there is no separate epenthetic element, but rather some form of contextual allomorphy for accusative / genitive morphology. However, an allomorphy account renders the phonological generalization that we saw in section 2 mere coincidence. It is possible that this is indeed a syncrhonic coincidence, perhaps with a diachronic explanation. I cannot distinguish between these hypotheses with the data available to me.

4 Further puzzles

4.1 *Another form of genitive.* I've argued that the extra /Ai/ or /ii/ in some accusative / genitive contexts is the result of epenthesis motivated by the following constraint:

(22) **ALIGN(V$\mu\mu$-ACC/GEN)**
Assign a * when an ACC/GEN suffix is not aligned to the right edge of a V$\mu\mu$ segment.

We've seen that when the noun being affixed to inherently ends in a V$\mu\mu$ segment, the assumed epenthesis does not occur. A complication for this analysis is that even when a noun ends in a V$\mu\mu$ segment, what appears to be redundant epenthesis of /Ai/ can occur in genitive contexts. Since this creates a situation where two V$\mu\mu$ segments would be adjacent, predictable epenthesis of /g/ between them applies:

(23) **Optional redundant epenthesis of /Ai/ in genitive forms**

a. *miizgɔi-(gɔi)-n*
cat-EM-GEN

b. *naadanxɔi-(gɔi)-n*
toy-EM-GEN

c. *ɔʒii-(gɔi)-n*
mother-EM-GEN

d. *zɵɵxɔi-(gɔi)-n*
sour.cream-EM-GEN

Interestingly in contrast, such redundant insertion of /ii/ is not acceptable in genitive forms:

[9] This is a typologically unusual epenthesis strategy, which Staroverov (2016) analyzes.

[10] Another version of a deletion analysis that would posit that /Ai/ or /ii/ is actually inherent to the noun stem, but sometimes deleted, faces the same issue.

(24) **No redundant epenthesis of /ii/ in genitive forms**

a. miisgɔj-(*gii)-n
cat-EM-GEN

b. *ɔʒii-(??/*gii)-n*
mother-EM-GEN

c. *zɵɵxɔi-(*gii)-n*
sour.cream-EM-GEN

Further, no redundant epenthesis of any variety is available in accusative forms:

(25) **No redundant epenthesis of either kind in accusative forms**

a. *miisgɔj-(*gii/*gɔi)-jɔ*
cat-EM-ACC

b. *ɔʒii-(*gii/*gɔi)-jɔ*
mother-EM-ACC

c. *zɵɵxɔi-(*gii/*gɔi)-jɔ*
sour.cream-EM-ACC

d. *buuruu-(*gii/*gɔi)-jɔ*
calf-EM-ACC

It is consistent with these facts to add to my account the proposal that there are in fact two varieties of genitive morpheme in this language: /n/ and /Ain/. When the latter affixes to a nominal stem that inherently ends in a V$\mu\mu$ segment, epenthesis appears to have applied redundantly. These facts deserve further consideration, since they may help clarify the nature of /Ai/ and /ii/. I leave this for future work.

4.2 *Truncated forms.* In contexts where /Ai/ or /ii/ has been inserted, it is often possible for the expected accusative /jɔ/ or genitive /n/ to not occur.[11]

(26) **Truncated accusative / genitive forms**

a. *galuu-nuud-ɔi-(jɔ/n)*
goose-PL-EM-ACC/GEN

b. *dugar-ai-(jɔ/n)*
Dugar-EM-ACC/GEN

c. *bʉlgɔm-ɔi-(jɔ/n)*
group-EM-ACC/GEN

d. *dugar-ii-(jɔ)*
Dugar-EM-ACC

Such truncated forms, which are quite frequent, are almost always ambiguous between accusative and genitive: context is necessary to determine which case is intended. The most straightforward way of accounting for such forms in the context of my epenthesis analysis would be to propose that they involve deletion of the original case suffix after epenthesis. Other analyses are likely feasible, but further investigation will be necessary to determine what the most accurate approach is.

5 Conclusion

I have argued that certain case morphemes in Barguzin Buryat are subject to a particular alignment constraint, which motivates an instance of epenthesis in some phonological contexts. Case morphology in this language is quite rich, and there are several other accusative / genitive forms that do not straightforwardly fit this analysis (though they do not falsify it, either). Further insight may be gained by comparing Barguzin

[11] Truncated forms where the only case marking is /ii/ are much less common that those using just /Ai/. I do not have an explanation for this fact.

Buryat with standard Buryat.[12] Future work should also seek to reduce the alignment constraint that this analysis depends on to something independent, but it remains possible that it is irreducible. I leave this for future research to consider.

5.1 *Another loose end.* As far as I know, the generalization that I proposed above is exception-less:

(27) **Phonological generalization about accusative and genitive in Barguzin Buryat**
The accusative /jɔ/ and genitive /n/ are always adjacent to a V$\mu\mu$.

However, it is not always the case that a nominal stem that ends in a V$\mu\mu$ segment allows direct affixation of both the accusative /jɔ/ or genitive /n/: Sometimes, what I have described as epenthesis must apply even with such nouns. For instance, consider *χalaa* ('branch'). /jɔ/ can suffix to this noun directly, but /n/ cannot. Rather, the epenthetic element must occur to allow suffixation of /n/, though such "redundant epenthesis" is not permitted when /jɔ/ is used.

(28) **Case forms for 'branch'**

a. *χalaa-∅*
branch-NOM

b. *χalaa-jɔ*
branch-ACC

c. * *χalaa-gɔi-jɔ*
branch-EM-ACC

d. * *χalaa-n*
branch-GEN

e. *χalaa-gɔi-n*
branch-EM-GEN

This asymmetry in the distribution of accusative and genitive marking is also evident with a few other nouns in my data set, such as *ʒodoo* ('fir tree') and *buruu* ('calf'). This puzzle is likely related to the complication about genitive marking mentioned in section 4.1 above. Further data gathering, with special attention paid to the phonology of each nominal stem, is likely necessary to resolve these and related puzzles.

[12] Poppe (1960)'s survey of standard Buryat reports the existence of the genitive/possessive forms /-ai/ and /-iin/, and a direct object marker /-(ii)ji/. These morphemes bear an obvious resemblance to the case markers in Barguzin Buaryat, but their exact status in the grammar of standard Buryat cannot be inferred from Poppe's overview.

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