A locality argument in favor of non-terminal insertion approaches to portmanteau exponence

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Abstract

This paper presents an argument against reducing portmanteau exponence to contextual allomorphy. The argument is based on cases of blocking of portmanteau exponence by non-intervening material, which goes against the locality condition on contextual allomorphy (Embick 2010; Bobaljik 2012). The core data behind the argument comes from a novel pattern of portmanteau blocking that results in independent exponence of three syntactic terminals (a *total default* pattern of portmanteau blocking). Additional evidence is provided by pseudo-ABA phenomena (Middleton 2021; Davis 2021; Caha 2024; Kasenov 2025) that also exemplify blocking of portmanteau exponence by non-local material. Insofar as locality plays an explanatory role in blocking of vocabulary insertion rules, total default portmanteau blocking supports non-terminal insertion analyses of portmanteau exponence.

Keywords: contextual allomorphy, non-terminal insertion, locality, Turkic

1 Introduction

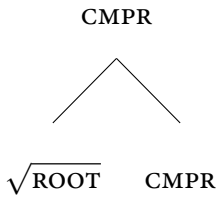
The core notion of generative realizational approaches to morphology (Distributed Morphology: Halle & Marantz 1993; Nanosyntax: Starke 2009; and others) is that the grammar involves a mechanism of mapping of syntactic terminals onto morpho-phonological exponents. The support for this mechanism comes from cases where the mapping is not one to one: *contextual allomorphy* involves mapping of the same syntactic terminal onto different exponents, depending on the surrounding morphosyntactic context. For example, whereas the English adjective *smart* has the comparative form *smart-er* that involves no changes to the adjectival stem, the English adjective *good* has the comparative form *bett-er*, in which the comparative affix is present, but the adjectival stem undergoes the *good*∼*bett-* alternation. The usual analysis of the pattern (adapting Bobaljik 2012) is that the root $\sqrt{\text{GOOD}}$ is mapped onto the exponent *bett-* in the context of the CMPR syntactic terminal and onto the exponent *good* elsewhere, while there is no context-sensitive rule for morpho-phonological realization of the root $\sqrt{\text{SMART}}$.

(1) The structure and the insertion rules

i. $\sqrt{\text{GOOD}} \leftrightarrow$ /*bett-*/ /___ CMPR

ii. $\sqrt{\text{GOOD}} \leftrightarrow$ /*good-*/

iii. $\sqrt{\text{SMART}} \leftrightarrow$ /*smart*/



Some English adjectives exhibit *portmanteau exponence*: their comparative form includes neither the comparative affix *-er*, nor their positive form (for example, *bad*∼*worse*). The point of debate is whether portmanteau exponence can be reduced to contextual allomorphy and, as such, be represented as a conspiracy of multiple vocabulary insertion rules, some of which map syntactic terminals to zero exponents (2a). The alternative is that portmanteau exponence is represented as a single in-

sertion rule that maps multiple syntactic terminals onto the same morpho-phonological exponent (2b; known as *non-terminal insertion*). The contextual allomorphy analysis is argued for by Embick & Marantz (2008), Embick (2010, 2017) among others, whereas the non-terminal insertion analysis is argued for by Haugen & Siddiqi (2016); Caha (2018, 2024) (again, among others). For illustration, I employ the spanning approach (Svenonius 2016).

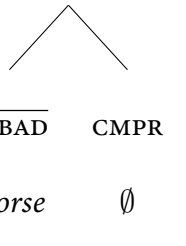
(2) Two analyses for *bad*∼*worse* alternation

a. Contextual allomorphy:

i. $\sqrt{\text{BAD}} \leftrightarrow$ */worse/* / ___CMPR

ii. CMPR $\leftrightarrow$ /∅/ / $\sqrt{\text{BAD}}$___

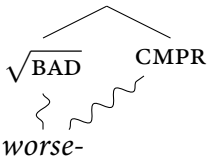
iii. $\sqrt{\text{BAD}} \leftrightarrow$ */bad/*



b. Non-terminal insertion:

i. $\langle\sqrt{\text{BAD}}, \text{CMPR}\rangle \leftrightarrow$ */worse/*

ii. $\sqrt{\text{BAD}} \leftrightarrow$ */bad/*



Much discussion has focused on theory-internal reasons to adopt non-terminal insertion or not (e.g., Haugen & Siddiqi 2016 argue that non-terminal insertion replaces many post-syntactic operations, while Embick 2017 argues that non-terminal insertion requires unmotivated syntactic movement). Some works (Radkevich 2010; Banerjee 2021) argue that non-terminal insertion is empirically necessary, but their arguments depend on assumptions that are external to the mechanism of vocabulary insertion and are thus limited (as noted by Gouskova & Bobaljik 2020).

This paper argues in favor of non-terminal insertion on the basis of established properties of vocabulary insertion without relying on auxiliary assumptions. The observation is that non-terminal insertion predicts a type of portmanteau blocking that contextual allomorphy cannot accommodate

without violating the locality condition on contextual allomorphy (Embick 2010; Bobaljik 2012): if a non-terminal insertion rule that maps more than two syntactic terminals to a single exponent is blocked, then each of the terminals is predicted to be realized via its default insertion rule (a *total default* pattern, contrasted with a *partial default* pattern where not all terminals undergo default exponence). In this work, I focus on blocking by intervention (Embick 2010; Paparounas 2024): a terminal H that comes in between Y and Z blocks the non-terminal insertion rule, resulting in default exponence rules of all terminals, even of X that is not adjacent to H, as demonstrated in (3).

(3) Total default portmanteau blocking in a non-terminal insertion analysis

a. Assumed VI rules

i. $\langle$X,Y,Z$\rangle$ $\leftrightarrow$ /α/

ii. X $\leftrightarrow$ /γ/

iii. Y $\leftrightarrow$ /δ/

iv. Z $\leftrightarrow$ /θ/

v. H $\leftrightarrow$ /ϵ/

b. Structure-exponents mappings

i. X]Y]Z $\rightsquigarrow$ /α/

ii. X]Y]H]Z $\rightsquigarrow$ /γ-δ-ϵ-θ/

In contrast, the contextual allomorphy approach does not allow for the intervening terminal H to block the application of the exponence rule that applies to X in the context of Y, as shown in (4) below. Given the locality condition, H may only block the vocabulary insertion rules that apply to Y in the context of Z or vice versa. Therefore, the contextual allomorphy approach does not predict that each of the terminals X,Y,Z will be mapped onto the default exponent, as shown by the zero exponence of X in (4b) regardless of presence of H. Therefore, only some terminals undergo default exponence (hence, this pattern is dubbed partial default blocking).

(4) A contextual allomorphy approach to portmanteau only allows partial default blocking

a. Assumed VI rules

i. X ↔ ∅ /___Y

ii. Y ↔ α /X___Z

iii. Z ↔ ∅ /Y___

iv. X ↔ /γ/

v. Y ↔ /δ/

vi. Z ↔ /θ/

vii. H ↔ /ϵ/

b. Structure-exponents mappings

i. X]Y]Z ⇝ /$\boxed{\emptyset}$-α-$\emptyset$/

ii. X]Y]H]Z ⇝ /$\boxed{\emptyset}$-δ-ϵ-θ/

This paper argues that the total default portmanteau blocking predicted by non-terminal insertion is attested. The claim is based on novel fieldwork data of copula system of Terek Kumyk, a dialect of Kumyk (< Kipchak < Turkic). The data comes from author's own fieldwork conducted in August 2022 and August 2023 in Predgornoye village (North Ossetia, Russia). My argument joins the existing discussion of pseudo-ABA phenomena in Middleton (2021), Davis (2021), Caha (2024), Kasenov (2025), who all argue that pseudo-ABA phenomena require non-terminal insertion. My addition is that the reason why pseudo-ABA phenomena require non-terminal insertion is the same reason why the total default portmanteau blocking does: both cases involve blocking of an exponence rule by non-local material, in violation of the locality condition on contextual allomorphy.

The paper is structured as follows. Section 2 expands upon the notion of locality for contextual allomorphy and highlights that locality is both necessary and sufficient for contextual allomorphy. It follows then, that non-local material cannot block contextual allomorphy. Section 3 uses this consequence to argue against contextual allomorphy approaches to portmanteau exponence on the

basis of pseudo-ABA phenomena and the total default portmanteau blocking pattern found in copula verb system of Terek Kumyk. Section 4 concludes.

2 Making and blocking contextual allomorphy

In this section, I introduce the notion of locality as a necessary and sufficient condition on contextual allomorphy. This notion lays ground for Section 3 that shows that blocking of portmanteau exponence presents blocking by non-local material, which goes against the well established properties of contextual allomorphy.

2.1 Intervention: locality is necessary

Consider the case of Khakas third person pronominals (Moskal & Smith 2016). In the singular column, the pronominal stem undergoes *o-*∼*an-* suppletion triggered by oblique case affixes. In the plural column, however, no suppletion takes place. The common analysis is that it is the presence of the plural affix *-lar-* in between the pronominal stem and the case affix that blocks suppletion. This type of blocking is known as an *intervention* effect.

(5) Intervening plural affix blocks pronominal stem suppletion in Khakas.

	SG	PL
NOM	*ol*	*o-lar*
ACC	*a-nɨ*	***o-lar-nɨ***
LOC	*an-de*	***o-lar-da***

Blocking by intervention requires that context-sensitive vocabulary insertion rules be subject to a

locality condition which states that the context of the vocabulary insertion rule is adjacent to its target. The locality condition is debated to involve either structural or linear adjacency (I take no position in the debate; see Embick 2010 for a linear adjacency condition, see Bobaljik 2012 for a structural adjacency condition, see Bruening 2020 for an argument that both might be required). Despite apparent counterexamples (Moskal & Smith 2016, Bruening 2018, Ganenkov 2020 a.o.), I maintain that the locality condition and, by extension, blocking by intervention is an important property of contextual allomorphy.

2.2 *ABA: locality is sufficient

On top of being necessary, locality is sufficient for contextual allomorphy, as supported by Bobaljik's (2012) account of the *ABA generalization. His finding is that no adjective undergoes suppletion in the comparative form without undergoing suppletion in the superlative form.

(6) Paradigms like the one below are unattested (Bobaljik 2012)

POS	CMPR	SPRL
good	*bett-er*	*good-est*
A	B-CMPR	A-SPRL

The analysis is that the structure behind the comparative form is contained in the structure behind the superlative form and thus a local trigger for allomorphy cannot be ignored. For the analysis to work, locality should be sufficient for contextual allomorphy.

(7) Bobaljik's approach to *ABA

a. The structure: ADJ] CMPR] SPRL]

b. If there is no superlative-specific suppletion, a rule like ADJ $\leftrightarrow$ /α/ /___CMPR must apply in the superlative form as well, because its context of application is met.

Summing up the content of this section, I have highlighted that for contextual allomorphy to obtain, locality of the trigger is necessary and sufficient. The locality condition predicts that a VI rule can be blocked only by material that comes in between the target and the trigger of the rule. What next section shows is that this prediction is not borne out consistently for portmanteau exponence. Therefore, insofar as locality is a crucial property of contextual allomorphy, portmanteau exponence cannot be reduced to contextual allomorphy.

3 Making and blocking portmanteau exponence

The core argument of this section is that the locality properties of contextual allomorphy are not borne out for portmanteau exponence. The argument is based upon two types of cases portmanteau exponence blocking by non-local material. The first type concerns intervention: since the contextual allomorphy approach reduces portmanteau exponence of more than 2 syntactic terminals to pairwise mutually-conditioned vocabulary insertion rules, it is not predicted that an intervener blocks portmanteau exponence fully (a total default blocking pattern), which is observed as shown by a case study of copular system of Terek Kumyk (< Kipchak < Turkic).

The second type of portmanteau exponence blocking comes from the so-called pseudo-ABA phenomena, apparent violations of *ABA generalizations. As highlighted by recent research, the pseudo-ABA cases involve portmanteau exponence and are productively modelled via competition of non-terminal insertion rules. I assert that pseudo-ABA cases involve blocking of portmanteau exponence by non-local material, again, suggesting that the properties that hold of contextual allo-

morphy do not hold of portmanteau exponence.

3.1 Total default portmanteau blocking in Terek Kumyk copulas

A relevant case for our purposes needs to involve blocking of a portmanteau exponent that results in independent exponence of the three or more syntactic terminals that are mapped onto the portmanteau exponent. With that in mind, consider the following examples that come from Terek Kumyk (< Kipchak < Turkic).[1] The data comes from the author's own fieldwork. The first set of examples establishes that the language possesses four copular verbs: an affirmative attributive copula, a negative attributive copula, an affirmative possessive copula, and a negative possessive copula. For the purposes of my argument, I focus on negative copulas.

(8) Four copulas in Terek Kumyk

a. The affirmative attributive copula: ∅

Süt baxa ∅.

milk expensive COP

'Milk is expensive.'

b. The affirmative possessive copula: *bar*

Fatima-nɨ kniška-sɨ bar.

F.-GEN book-POSS.3SG COP.POSS

'Fatima has a book.'

c. The negative attributive copula: *tügül*

Süt baxa tügül.

milk expensive NEG.COP

'Milk isn't expensive.'

d. The negative possessive copula: *ök*

Fatima-nɨ kniška-sɨ ök

F.-GEN book-POSS.3SG NEG.COP.POSS

'Fatima doesn't have a book.'

However, the four-way contrast is lost in presence of overt aspectual morphology. In these forms,

[1] The presentation of data conforms with the Leipzig Glossing Rules.

the verbal stem appears as *bol-* and, crucially, the negation affix *-mA* is present in negative copulas. The pattern resembles blocking by intervention, despite the fact that the aspectual morphology does not arise in between the default verb *bol-* and the negation affix *-mA*.

(9) Overt aspectual morphology (namely, perfective affix *-GAn*) neutralizes the contrast between different copular verbs

a. Affirmative attributive copula

*Süt baxa bol-ʁan / *∅-gen*

milk costly be-PRF COP-PRF

'Milk has been expensive.'

b. Affirmative possessive copula

*Fatima-nɨ kniška-sɨ bol-ʁan / *bar-ʁan*

F.-GEN book-3 be-PRF COP.POSS-PRF

'Fatima has had a book.'

c. Negative attributive copula

*Süt baxa bol-ma-ʁan / *tügül-gen.*

milk costly be-NEG-PRF NEG.COP-PRF

'Milk has not been expensive.'

d. Negative possessive copula

*Fatima-nɨ kniška-sɨ bol-ma-ʁan / *ök-ken*

F.-GEN book-3 be-NEG-PRF

NEG.COP.POSS-PRF

'Fatima has not had a book.'

Such total default pattern of blocking already violates the locality condition on contextual allomorphy: since the aspectual affix *-GAn* does not come in between the verbal stem and the negative affix, their portmanteau exponence is not predicted to be blocked by the aspectual affix, should their portmanteau exponence be reducible to contextual allomorphy. Note that it is commonly argued for Turkic languages that the linear position of negation corresponds to the low position of negation in the clausal spine (see Ouhalla 1990; Kelepir 2001; Zanon 2014 among others). Therefore, the

linear order of affixes indicates that the aspectual affix intervenes neither linearly, nor structurally.

I suggest that the data should be analyzed as blocking of a non-terminal insertion rule by intervention in between members of the span. For example, the negative attributive copula *tügül* realizes the ⟨*v*,Neg,T⟩ span. Recall the template of a total default portmanteau blocking pattern, argued in the introduction to be detrimental to a contextual allomorphy approach. Under the assumption that T is zero-exponed in Terek Kumyk, the data fits the pattern.

(10) Total default portmanteau blocking in Terek Kumyk

a. Assumed VI rules

i. $\langle X,Y,Z\rangle \leftrightarrow /\alpha/$

ii. $X \leftrightarrow /\gamma/$

iii. $Y \leftrightarrow /\delta/$

iv. $Z \leftrightarrow /\theta/$

v. $H \leftrightarrow /\epsilon/$

b. Terek Kumyk VI rules:

i. $\langle v,Neg,T\rangle \leftrightarrow$ */tügül/*

ii. $v \leftrightarrow$ */bol/*

iii. $Neg \leftrightarrow$ */-mA/*

iv. $T \leftrightarrow /\emptyset/$

v. $Asp_{[PRF]} \leftrightarrow$ */-GAn/*

c. Structure-exponents mappings

i. $X]Y]Z \rightsquigarrow /\alpha/$

ii. $X]Y]H]Z \rightsquigarrow /\gamma\text{-}\delta\text{-}\epsilon\text{-}\theta/$

d. Structure-exponents mappings:

i. $v]Neg]T \rightsquigarrow$ *tügül*

ii. $v]Neg]Asp_{[PRF]}]T \rightsquigarrow$ *bol-ma-gan-*$\emptyset$

It is necessary to address a possible contextual allomorphy analysis for blocking of *tügul* by intervention that makes use of Embick's (2010) notion of *pruning*, the idea that zero allomorphs are transparent for allomorphy contexts. Under this analysis, the Neg head has a zero-allomorph conditioned by adjacency with both *v* and T and the *v* head has a special allomorph conditioned by adjacency with T. Thus, overt Asp intervenes for the zero allomorph of Neg and, by extension, for the special allomorph of *v*.

(11) A pruning-based analysis (rule b applies before rule a)

a. $v \leftrightarrow$ *tügul-* /___T

b. Neg $\leftrightarrow \emptyset$ /v___T

The reason why this idea does not work for the Terek Kumyk case is that the rule that results in the exponent *tügül* has to be conditioned by negation due to the affirmative-negative contrast in the copular system of Terek Kumyk. Suppose the VI rules in (11) which require pruning of the Neg head. It is then predicted that the VI rule (11a) will apply in absence of negation from the structure as well (i.e., in the affirmative context) since Neg is rendered irrelevant for the allomorphy of v, thus losing the affirmative-negative morphological contrast between $\emptyset$ and *tügül*. Any account that assumes pruning of Neg will fail. Therefore, the allomorphy of the v head is conditioned by Neg and, given the locality condition, it cannot be blocked by Asp in the v]Neg]Asp structure.

I conclude then by stating that the copular system of Terek Kumyk presents a case of total default portmanteau blocking, which is impossible under a contextual allomorphy approach. In the next section, I show that the pseudo-ABA phenomena lead to the same conclusion regarding non-local nature of portmanteau blocking (along the lines of Caha 2024).

3.2 Pseudo-ABA and non-terminal insertion

Returning to the *ABA generalization, it has already been pointed out in Bobaljik 2012 that some apparent counterexamples are present in world's languages. As argued for by Middleton (2021), Davis (2021), Caha (2024), Kasenov (2025) (with different technical implementations, however), such patterns are best analyzed as competition between non-terminal insertion rules. In order to keep the discussion short, let me recap Davis' (2021) claims about Barguzin Buryat (< Mongolic;

spoken primarily in Russia) number-case interactions in nominal morphology. The relevant pattern is that the optional suppletive plural affix *-nuuʃA* is only possible in accusative and genitive cases and blocks independent exponence of the cases themselves.[2]

(12) Barguzin Buryat optional suppletive plural affix (Davis 2021)

cat.PL	Regular	Suppletive	Suppletive blocks case exponence
NOM	miisgəi-nuud	*miisgəi-nuuʃə	
ACC	miisgəi-nuud-iijə	miisgəi-nuuʃə	*miisgəi-nuuʃ-əijə
DAT	miisgəi-nuud-tə	*miisgəi-nuuʃə-tə	

An *ABA pattern is formed by the regular NOM–suppletive ACC–regular DAT triplet: given the case containment hypothesis (Caha 2009), it is mysterious why the case-conditioned suppletion of the plural affix is impossible in the dative while possible in the accusative. It is relevant that the middle cell of the paradigm (the suppletive ACC.PL cell, the B of ABA) is a portmanteau exponent (as evidenced by impossibility of case exponence), as is the case in other pseudo-ABA patterns, discussed by Middleton 2021 and Caha 2024. Violations of *ABA where the middle cell is a portmanteau exponent therefore seem to require blocking of allomorphy by syntactic material that does not intervene (for example, blocking of allomorphy relationship between PL and ACC by DAT). I conclude then that the pseudo-ABA cases fall into my general argument against reducing portmanteau exponence to contextual allomorphy, which is based on non-local blocking of portmanteau exponents.

[2] I follow Davis (2021) in treating the alternation as morphological, not phonological. See ibid. for complications. I also follow Davis (2021, fn. 7) in simplifying the vocalic alternations [nuud]∼[nʉʉd] and [nuuʃə]∼[nʉʉʃə].

4 Conclusion and outlook

This article has argued that portmanteau exponence cannot be reduced to contextual allomorphy on the basis of the patterns in portmanteau blocking. I have argued that while blocking of contextual allomorphy is local (see blocking by intervention), blocking of portmanteau exponence is non-local if portmanteau exponence is always analyzed as contextual allomorphy. Insofar as locality is a crucial property of allomorphy blocking, portmanteau exponence cannot always be represented as a number of contextual allomorphy rules.

References

Banerjee, Neil. 2021. *On the interaction of portmanteaux and ellipsis*. Massachusetts Institute of Technology dissertation.

Bobaljik, Jonathan David. 2012. *Universals in comparative morphology: Suppletion, superlatives, and the structure of words*. MIT Press.

Bruening, Benjamin. 2018. Non-local allomorphy in passamaquoddy-maliseet. *Snippets* 34(34). 6–7.

Bruening, Benjamin. 2020. *Strict Linear and Hierarchical Adjacency: P + Det Combinations*. Talk at LSA 2020. https://udel.edu/~bruening/Downloads/PDetLSA2020Slides.pdf.

Caha, Pavel. 2009. *The Nanosyntax of Case*. Universitetet i Tromsø dissertation.

Caha, Pavel. 2018. Notes on insertion in Distributed Morphology and Nanosyntax. *Exploring Nanosyntax* 1. 57–87.

Caha, Pavel. 2024. Root and stem allomorphy without multiple exponence: the case of special nominatives. *Morphology*. 1–45.

Davis, Colin. 2021. Case-sensitive plural suppletion in Barguzin Buryat: On case containment, suppletion typology, and competition in morphology. *Glossa: a journal of general linguistics* 6(1). 1–26.

Embick, David. 2010. *Localism versus globalism in morphology and phonology*. MIT Press.

Embick, David. 2017. On the targets of phonological realization. In Vera Gribanova & Stephanie S. Shih (eds.), *The morphosyntax-phonology connection: locality and directionality at the interface*, 255–284. Oxford University Press Oxford.

Embick, David & Alec Marantz. 2008. Architecture and blocking. *Linguistic inquiry* 39(1). 1–53.

Ganenkov, Dmitry. 2020. Missing elsewhere: Domain extension in contextual allomorphy. *Linguistic Inquiry* 51(4). 785–798.

Gouskova, Maria & Jonathan D Bobaljik. 2020. Allomorphy and vocabulary insertion. *Ms. New York University and Harvard University*.

Halle, M & Alec Marantz. 1993. Distributed morphology and the pieces of inflection. In *The view from building 20*, 111–176. The MIT Press.

Haugen, Jason D & Daniel Siddiqi. 2016. Towards a restricted realization theory: Multimorphemic monolistemicity, portmanteaux, and post-linearization spanning. In *Morphological metatheory*, 343–386. John Benjamins Publishing Company.

Kasenov, Daniar. 2025. ABA in russian adjectives, subextraction, and Nanosyntax. In Berit Gehrke et al. (eds.), *Advances in formal slavic linguistics 2022*, 255–292. Language Science Press.

Kelepir, Meltem. 2001. *Topics in turkish syntax: clausal structure and scope*. Massachusetts Institute of Technology dissertation.

Middleton, Jane. 2021. Pseudo-ABA patterns in pronominal morphology. *Morphology* 31(4). 329–354.

Moskal, Beata & Peter W Smith. 2016. Towards a theory without adjacency: Hyper-contextual VI-rules. *Morphology* 26(3). 295–312.

Ouhalla, Jamal. 1990. Sentential negation, relativised minimality and the aspectual status of auxiliaries. *The Linguistic Review*.

Paparounas, Lefteris. 2024. Visibility and intervention in allomorphy: Lessons from Modern Greek. *Linguistic Inquiry* 55(3). 537–577.

Radkevich, Nina V. 2010. On location: The structure of case and Adpositions.

Starke, Michal. 2009. Nanosyntax: A short primer to a new approach to language. *Nordlyd* 36(1). 1–6.

Svenonius, Peter. 2016. Spans and words. *Morphological metatheory* 229. 201.

Zanon, Ksenia. 2014. On the status of tp in turkish. *Studies in Polish Linguistics* 9(3). 163–201.