

Rule Interaction in Kleverlandish Diminutive Formation

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Abstract

This paper discusses the various patterns of diminutive formation in Kleverlandish, a German variety of Low Franconian. Kleverlandish displays four diminutive allomorphs (default: /-kə/; further variants: /-skə/, /-əkə/, /-tjə/), whose distribution is determined by the final segment of the base. Whereas noun stems with a final coronal sonorant exhibit a complex pattern of allomorphic distribution, those with a final dorsal consonant evoke a complex interaction of rules in diminutives. I will argue that the four allomorphs should be analyzed as separate lexical items and that they are not related by generalized rules of /s/- or schwa epenthesis.

1. Introduction

The Kleverlandish dialect, which is a variety of Low Franconian in the transition zone to Low German and High/Standard German, displays an interesting allomorphy of diminutive formation.¹ Apart from the default form /-kə/, the following allomorphs occur: /-skə/, /-tjə/ and /-əkə/. Their distribution is mainly determined by the final stem segment, which I will demonstrate below.

The transitional character of Kleverlandish manifests itself in at least two properties of the diminutives: first, unlike the diminutives of Standard Dutch, which is the major representative of Low Franconian, those of Kleverlandish trigger umlaut, thus following the pattern of the High German diminutive

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¹In the following I am referring to the dialect variety spoken in Kleve (Cleves), Germany. Note that this dialect does not have a standardized orthography. Long vowels are indicated by ⟨VV⟩, short vowels in closed syllables by complex orthographic codas ((VCC)).

-*chen*. Umlaut applies without exceptions and leads to a fronting of back stem vowels.²

(1) *Umlaut patterns*³

	Base	Diminutive	
/u/ ~ /y/	<i>Bluus</i>	<i>Blüüs-ke</i>	'shirt'
/ʊ/ ~ /ʏ/	<i>Blumm</i>	<i>Blümm-ke</i>	'flower'
/o/ ~ /ø/	<i>Poot</i>	<i>Pööt-je</i>	'paw'
/ɔ/ ~ /œ/	<i>Flokk</i>	<i>Flökk-ske</i>	'(snow) flake'
	<i>Oos</i> [ɔ:]	<i>Öös-ke</i> [œ:]	'carrion, bitch'
/a/ ~ /æ/	<i>Danz</i>	<i>Dänz-ke</i>	'dance'
/aʊ/ ~ /ɔʏ/	<i>Frau</i>	<i>Fräu-ke</i>	'woman'

Secondly, in contrast to High German, Kleverlandish strongly avoids zero-marked plural forms; the plural of diminutives is marked by /-s/ throughout all variants of the diminutive (e.g. *Blümm-ke-s* 'little flowers' – cf. High German *Blüm-chen-Ø*).

Some diminutives exhibit an unexpected lengthening or shortening of the stem vowel; the respective cases of stem vowel lengthening seem to be paralleled in the plural of the base forms:⁴

(2) *Lengthening of the stem vowel*

	Base		Diminutive	Plural	
/ɔ/	<i>Hoff</i>	[œ:]	<i>Hööf-ke</i>	<i>Hööf</i>	'yard'
/ʏ/	<i>Hüss</i>	[y:]	<i>Hüüs-ke</i>	<i>Hüüs</i>	'house'
/ʊ/	<i>Muss</i>	[y:]	<i>Müüs-ke</i>	<i>Müüs</i>	'mouse'

The shortening of stem vowels seems to be restricted to the diminutive:

²Note that there is also an interesting, though lexicalized case of multiple umlaut: the diminutive of *Auto* [aʊto] 'car' is *Äutö-ke* [ˈɔʏtœkə]/[ˈɔʏtəkə].

³Kleverlandish does not exhibit a strict correlation between tenseness/laxness of vowels and their respective length; one can find short tensed vowels such as /e/ (e.g., *Lecht* 'light') and long lax vowels such as /ɔ:/ or /œ:/.

⁴See Booij (1995: 72) for similar cases in Standard Dutch.

(3) Shortening of the stem vowel

	Base		Diminutive	Plural	
/u:/	<i>Kuuk</i>	[ʏ]	<i>Kükk-ske</i>	<i>Küük</i>	'cake'
	<i>Fuut</i>		<i>Fütt-je</i>	<i>Füüt</i>	'foot'
/o:/	<i>Hoop</i>	[œ]	<i>Höpp-ke</i>	<i>Hööp</i>	'heap'
/ɔ:/	<i>Schoop</i>	[œ]	<i>Schöpp-ke</i>	<i>Schööp</i>	'sheep'
/i:/	<i>Brief</i>	[ɪ]	<i>Briff-ke</i>	<i>Briev-e</i>	'letter'
	<i>Piep</i>		<i>Pipp-ke</i>	<i>Piep-e</i>	'pipe'

But since lengthening/shortening does not occur systematically and seems to be a lexicalized property of certain nouns, I do not pursue this issue further.

I will first discuss the default form of the diminutive and then the other allomorphs, which are suffixed to stems that end in coronal or dorsal consonants. Note that I do not intend to provide a complete picture of the phonological rules in Kleverlandish that interact with diminutive formation; I will confine myself to the aspects that are relevant for diminutives.

2. The Default Form /-kə/

The default form of the diminutive (/ -kə/) is used after stems that end in (i) vowels or glides, (ii) labial consonants or (iii) coronal fricatives (/s, z/):⁵

(4) Default form of the diminutive

Stem-final segment	Base	Diminutive	
/V/	<i>Ei</i>	<i>Ei-ke</i>	'egg'
/j/	<i>Floj</i>	<i>Flöj-ke</i>	'flea'
/R/	<i>Fenger</i> [ɐ]	<i>Fenger-ke</i>	'finger'
/m/	<i>Flamm</i>	<i>Flämm-ke</i>	'flame'
/p/	<i>Dropp</i>	<i>Dröpp-ke</i>	'drop'
/v/	<i>Duuv</i>	<i>Düüv-ke</i>	'pigeon'
/f/	<i>Hoff</i>	<i>Höf-ke</i>	'yard'
/s/	<i>Foss</i>	<i>Föss-ke</i>	'fox'
/z/	<i>Nöös</i>	<i>Nöös-ke</i>	'nose'

⁵The coronal fricative /f/ is restricted to word-initial position. The French loanword *blamaasch* 'disgrace' is the only exception to this generalization. With sufficient contextual support my informants accepted the diminutive *Blamääsch-ke*.

Due to final devoicing (FDV), which applies to syllable-final obstruents, the voicing contrast in the final segment of the stem is neutralized in the base form as well as in the diminutive. FDV may be stated as follows:

- (5) (Wiese 1996: 201)
 FDV (Final devoicing): [+obstruent] → [-voice] / ___]_σ

Note also that the uvular rhotic /R/ is vocalized in post-vocalic position (i.e., realized as [ɐ]).⁶ Therefore, stems that end in /R/ seem to pattern like vowel-final stems and not like stems with a final dorsal consonant (see section 4). I will adopt Wiese's simplified /R/-vocalization rule, which is based on an underspecification analysis of the respective phonemes; the details of /R/-vocalization are not relevant for the discussion of Kleverlandish diminutives. (6) applies to /R/ in rhyme position.

- (6) (Wiese 1996: 256)
- $$\text{RV (/R/-vocalization): } \left[\begin{array}{l} +\text{continuant} \\ -\text{obstruent} \end{array} \right] \rightarrow [-\text{consonantal}] / \begin{array}{l} \text{Rhyme} \\ | \\ \text{---} \end{array}$$

3. Stems with a Final Coronal Consonant

Apart from stems that end in coronal fricatives other coronal-final stems do not take the default form of the diminutive. The least restricted allomorph is /-tjə/, which is chosen after stems with final coronal non-continuants:

- | | | | | |
|-----|-----|-------------------|-------------------------|------------|
| (7) | /l/ | <i>Deckel</i> | <i>Deckel-tje</i> | 'lid' |
| | | <i>Läpel</i> | <i>Läpel-tje</i> | 'spoon' |
| | /n/ | <i>Boon</i> | <i>Böön-tje</i> | 'bean' |
| | | <i>Kaploon</i> | <i>Kaplöön-tje</i> | 'chaplain' |
| | /d/ | <i>Fodd</i> [fət] | <i>Född-je</i> [fœt.jə] | 'rags' |
| | | <i>Hond</i> | <i>Hönd-je</i> | 'dog' |
| | /t/ | <i>Katt</i> | <i>Kätt-je</i> | 'cat' |
| | | <i>Pott</i> | <i>Pött-je</i> | 'pot' |

As the examples illustrate, there is cluster simplification in the sequence of coronal (oral) stops, thus leading to /t/-deletion, which is part of a general

⁶If /R/ is followed by /t/, the rhotic is realized as a fricative.

degemination rule (see Booij 1995: 68f. for Standard Dutch and Wiese 1996: 229ff. for Standard German). Stems with complex final clusters consisting of a fricative and /t/ show a peculiar behavior, to which I will return in section 5.

A subset of the stems with a final coronal sonorant takes another diminutive allomorph, namely /-əkə/. This diminutive allomorph is subject to the prosodic context requirement that the stem vowel be short; polysyllabic stems must show final stress in addition. Monosyllabic stems with this pattern are quite common. Note that these nouns take /-ə/ as plural marker, which, however, is not confined to this class of nouns (see also cases in (3)):⁷

(8) *Monosyllabic stems*

	Base	Diminutive	Plural	
/n/	<i>Dänn</i>	<i>Dänn-eke</i>	<i>Dänn-e</i>	‘fir’
	<i>Pann</i>	<i>Pänn-eke</i>	<i>Pann-e</i>	‘pan’
/l/	<i>Brell</i>	<i>Brell-eke</i>	<i>Brell-e</i>	‘glasses’
	<i>Mull</i>	<i>Müll-eke</i>	<i>Mull-e</i>	‘mouth, trap’

Polysyllabic nouns are mostly loanwords. They also tend to mark the plural of the base form with /-ə/.

(9) *Polysyllabic stems*

	Base	Diminutive	Plural	
/n/	<i>Ma'schinn</i>	<i>Maschinn-eke</i>	<i>Maschinn-e</i>	‘machine’
	<i>Gar'dinn</i>	<i>Gardinn-eke</i>	<i>Gardinn-e</i>	‘curtain’
/l/	<i>Ka'päll</i>	<i>Kapäll-eke</i>	<i>Kapäll-e</i>	‘chapel’
	<i>Mo'däll</i>	<i>Modäll-eke</i>	<i>Modäll-e</i>	‘model’
	<i>Ka'nonn</i>	<i>Kanönneke</i>	<i>Kanonn-e</i>	‘canon’
	<i>Karu'ssäll</i>	<i>Karusäll-eke</i>	<i>Karusäll-s</i>	‘carousel’
	<i>Kase'roll</i>	<i>Kaseröll-eke</i>	<i>Kaseröll-e</i>	‘casserole’

One could analyze the allomorph /-əkə/ as a combination of the default form /-kə/ with additional schwa epenthesis – as some kind of reflex of a prosodic minimality condition. However, I am not aware of any other morphological

⁷ Kleverlandish plural forms also seem to be subject to a prosodic minimality requirement (being at least bimoraic). However, the additional requirement that there be an overt exponent for plural leads to the insertion of further segmental or super-segmental material if the base already fulfills this minimality condition (e.g. umlaut, suffixation of /ə/, /s/ etc.).

derivation in Kleverlandish that would require schwa epenthesis just with stems of this makeup.

A comparison with Standard Dutch may be instructive. Standard Dutch (Booij 1995, Gussenhoven and Jacobs 1998) has a diminutive form that seems to be composed of an epenthetic schwa and the default form /-tjə/, namely /-ətjə/. This allomorph, however, is suffixed to all sonorant-final stems, as the following examples illustrate.⁸

(10) *Dutch schwa-epenthesizing diminutives*

(Gussenhoven and Jacobs 1998)

/ŋ/	slɑŋ	slɑŋ-ətjə	'snake'
/m/	bɔm	bɔm-ətjə	'bomb'
/n/	pɑn	pɑn-ətjə	'pot'
/l/	bɑl	bɑl-ətjə	'ball'
/r/	snɔr	snɔr-ətjə	'moustache'

Even with this more general pattern of schwa epenthesis/prosodic minimality requirement, the question arises as to why short vowel stems with final obstruents should project a different prosodic structure than short vowel stems with final sonorants (see, for instance, Botma and Torre 2000 for such a proposal). Given that the Kleverlandish /-əkə/-diminutives only occur with a subset of the sonorant-final stems, which renders a relation between segmental and prosodic structure even more questionable, I assume that there is no productive rule of schwa epenthesis; I take the allomorph to be the fixed sequence /-əkə/ with the combined segmental-prosodic input condition mentioned above.

4. Stems with a Final Dorsal Consonant

At first sight the allomorph /-skə/ seems to occur after velar-final stems, as evidenced by stems ending in /k/ or /ŋ/:

⁸The Dutch dialect of Sittard does not exhibit any diminutive allomorph with initial schwa, although it resembles Kleverlandish in most other respects (see Gussenhoven and Jacobs 1998: 109-112).

(11)	/k/	<i>Bukk</i>	<i>Bükk-ske</i>	‘book’
		<i>Dakk</i>	<i>Däkk-ske</i>	‘roof’
		<i>Pläkk</i>	<i>Pläkk-ske</i>	‘spot’
	/ŋ/	<i>Schlang</i>	<i>Schläng-ske</i>	‘snake’
		<i>Chaiselongue</i>	<i>Chaiselöng-ske</i>	‘chaise longue’
		<i>Kartong</i>	<i>Kartöng-ske</i>	‘cardboard’

The picture gets more complex with nouns that exhibit an underlying /g/ as final stem segment. This velar is subject to a spirantization rule (/g/-spirantization, Wiese 1996: 206-09), which applies in syllable-final position. (12) illustrates /g/-spirantization; the plural form provides evidence for the underlying representation as velar plosive:

(12)	<i>/g/-Spirantization</i>			
	Singular		Plural	
	<i>Saag</i>	[ç]	<i>Saag-e</i>	[g] ‘saw’
	<i>Oog</i>		<i>Oog-e</i>	‘eye’

The rule for /g/-spirantization may be stated as follows:

(13) (Wiese 1996: 207)

$$\text{GSP(/g/-spirantization): [continuant] } \rightarrow \left[\begin{array}{c} \text{—} \\ \text{+voice} \\ \text{+obstruent} \\ \text{Dorsal} \end{array} \right]_{\sigma}$$

As the examples in (12) demonstrate, Kleverlandish /g/-spirantization is not confined to contexts with preceding /i/ – unlike Standard German (Standard German: *König* [ç] ‘king’). Moreover, /g/-spirantization feeds another well-known rule for consonants, namely dorsal fricative assimilation (DFA), often dubbed “*ich-ach* alternation” (see Wiese 1996, Robinson 2001): depending on the preceding segment, the dorsal fricative surfaces as [ç], [x] or [χ].

Before demonstrating the distribution of the allophones let me point out that Kleverlandish has only few lexical items with underlying dorsal fricatives. This results from the fact that Kleverlandish has not undergone the High German consonant shift (spirantization of plosives), which created many forms with dorsal fricatives. The following examples illustrate the difference:

(14) *Fricative-stop correspondence*

High German		Kleverlandish		
<i>Dach</i>	[χ]	<i>Dakk</i>	/k/	'roof'
<i>Küche</i>	[ç]	<i>Köök</i>		'kitchen'
<i>Schiff</i>	/f/	<i>Schepp</i>	/p/	'ship'
<i>Straße</i>	/s/	<i>Stroot</i>	/t/	'street'

Underived dorsal fricative phonemes are confined to positions before /t/.

(15) *Dorsal fricatives*

[χ]	<i>achter</i>		'behind'
	<i>Macht</i>		'power'
	<i>Dochter</i>		'daughter'
[ç]	<i>Knächt</i>	[æ]_	'farmhand'
	<i>Löcht</i>	[ø]_	'candlestick'
	<i>Plecht</i>	[e]_	'duty'
	<i>Trechter</i>		'funnel'

These examples already indicate that [ç] surfaces after front vowels. In contrast to Standard German there are no Kleverlandish items in which an underlying dorsal fricative is preceded by one of the sonorants /l, r, n/, which then would trigger the realization of the fricative as [ç].⁹ [χ] is realized after non-high back vowels; the third allophone [x] appears after high back vowels (see (18-a) and (20)).

Since the allophone [ç] does not have a wider distribution than the two other allophones and since most dorsal fricatives result from /g/-spirantization I analyze [x/(ɣ)] as basic and derive [ç/(j)] and [χ/(ɞ)] via fronting or lowering, respectively. I adopt Wiese's (1996: 23) featural system for describing the inventory of dorsal consonants in Kleverlandish, which is given in table 1.

⁹In my search for such items I managed to elicit a diminutive for the High German loanword *Molch* 'newt': *Mölch-ske*.

	ç/(j)	k/g	x/(ɣ)	ŋ	χ/(ʁ)	ʀ
obstruent	+	+	+	-	+	-
dorsal	+	+	+	+	+	+
continuant	+	-	+	-	+	+
nasal	-	-	-	+	-	-
front	+	-	-	-	-	-
high tongue position	+	+	+	+	-	-
low tongue position	-	-	-	-	+	+

Table 1: Dorsal consonants in Kleverlandish

The two rules of dorsal fricative assimilation can be formulated as follows:

- (16) a. **DFF** (dorsal fricative fronting):
- $$\left[\begin{array}{c} \text{Dorsal} \\ +\text{obstruent} \\ +\text{continuant} \end{array} \right] \rightarrow [+front] / \left[\begin{array}{c} -\text{consonantal} \\ +\text{front} \end{array} \right] _$$
- b. **DFL** (dorsal fricative lowering):
- $$\left[\begin{array}{c} \text{Dorsal} \\ +\text{obstruent} \\ +\text{continuant} \end{array} \right] \rightarrow [+low] / \left[\begin{array}{c} -\text{consonantal} \\ -\text{front} \\ -\text{high} \end{array} \right] _$$

Nouns with a final /g/ segment are subject to a complex interaction of phonological rules. As Kiparsky (1968) already pointed out, /g/-spirantization must be ordered before final devoicing because it would otherwise be bled by final devoicing, as illustrated for *Oog* ‘eye’ in (17). /g/-spirantization feeds the dorsal fricative assimilation rule complex (DFF/DFL):

- (17) a. /o:g/ →_{GSP} [o:ɣ] →_{DFL} [o:ʁ] →_{FDV} [o:χ]
 b. /o:g/ →_{FDV} [o:k] *→_{GSP}

In umlaut contexts the dorsal fricative alternation shifts the derived fricative to its front dorsal counterpart [ç], as shown for the following contrast between *Zug* ‘train’ vs. *Züüg* ‘trains’. In the context of a preceding high back vowel (see (18-a)), the fricative is realized as the velar allophone because neither DFL nor DFF apply:

- (18) a. /tsʊg/ →_{GSP} [tsʊʏ] →_{FDV} [tsʊx]
 b. /tsy:g/ →_{GSP} [tsy:ʏ] →_{DFE} [tsy:j] →_{FDV} [tsy:ç]

Diminutive formation of nouns with /g/-final stems follows the pattern in (18-b); the sequence of rules must be enriched by diminutive suffixation (DIM) and umlaut (UML):

- (19) /... V... g/ →_{DIM} [... V... g-skə^[+front]] →_{UML} [... V_[+front]... g-skə]
 →_{GSP} [... V_[+front]... ʏ-skə] →_{DFE} [... V_[+front]... j-skə]
 →_{FDV} [... V_[+front]... ç-skə]

I assume that the diminutive suffix has a floating feature [+front], which is linked to the stem vowel. (20) shows some respective diminutive forms.

- (20) *Nouns with final /g/*
- | | Singular | | Plural | | |
|--|--------------|-----|------------------|-----|----------|
| | <i>Saag</i> | [χ] | <i>Sääg-ske</i> | [ç] | ‘saw’ |
| | <i>Oog</i> | [χ] | <i>Öög-ske</i> | | ‘eye’ |
| | <i>Plugg</i> | [x] | <i>Plügg-ske</i> | | ‘plough’ |

If one would conclude from the examples in (11) that the diminutive allomorph /-skə/ is restricted to stems that end in velar consonants, the forms in (20) would appear to be cases of counterbleeding (see Baković’s 2011 formulation of counterbleeding in (21)), i.e., umlaut and dorsal fricative fronting would change the right edge of the stem in such a way that it could not be the input for /-skə/ suffixation.

- (21) B counterbleeds A if B eliminates potential inputs to A and A precedes B.

However, the context for /-skə/ is best characterized as an underspecified final dorsal stem segment. Note that the set of dorsal consonants includes the rhotic /R/, which is vocalized in rhyme position. However, since the syllabic position of /R/ is only determined after morphological processes such as diminutive formation, one cannot assume vocalization prior to diminutive suffixation. Therefore, /R/ has to be excluded from the set of possible right stem edges for /-skə/, which means that the context specification for /-skə/ should be set to [Dorsal,+obstruent].

Since there are no equivalent cases of /s/-epenthesis in other domains of Kleverlandish morphology, I refrain from postulating a rule of /s/-epenthesis

for the default form of the diminutive (but see Gussenhoven and Jacobs 1998 for such an SPE-like treatment of the /-skə/-allomorph in various Dutch dialects). I will return to this issue in the next section.

5. A Complex Case of Cluster Simplification

The last pattern of diminutive formation to be considered is the complication that arises with stems that end in complex clusters of the type fricative and /t/. Quite unexpectedly, these stems do not take the allomorph /-tjə/, which is generally used after other /t/-final stems. Instead, the cluster is simplified by deletion of the stem-final plosive and the diminutive is marked with the allomorph that fits the derived environment.¹⁰

Diminutive-induced cluster simplification is found systematically with the coda cluster /st/; the two other contexts are only evidenced by a few lexical items. The simplification of the underlying coda clusters /st/ and /ft/ yields a context for the default allomorph /-kə/. If the cluster-initial fricative is dorsal, the allomorph /-skə/ is used.

(22)	Cluster simplification			
	/st/ → [s]	<i>Kast</i>	<i>Käs-ke</i>	‘closet’
			* <i>Käs(t)-je</i>	
		<i>Fust</i>	<i>Füs-ke</i>	‘fist’
		<i>Knust</i>	<i>Knüs-ke</i>	‘chunk (of bread)’
	/ft/ → [f]	<i>Geschäft</i>	<i>Geschäf-ke</i>	‘business’
	/[Dorsal]t/ → [ç]	<i>Gesecht</i>	<i>Gesech-ske</i>	‘face’
		<i>Lecht</i>	<i>Lech-ske</i>	‘light’

These diminutives exhibit a rule ordering paradox: the final plosive is deleted in the context of diminutive formation (and possibly other obstruent-initial suffixes). Therefore, diminutive formation should apply before cluster simplification. But the latter bleeds the context for the diminutive allomorph that would be used in the first place. With regard to the forms that take the default allomorph one could solve the indicated dilemma by assuming a more specific

¹⁰There is a general (optional) rule of /t/-deletion in Standard Dutch (see Booij 1995: 152-154): if a complex coda ending in /t/ is followed by an obstruent, /t/ may be deleted. Since I have not studied this process in Kleverlandish more thoroughly, I cannot provide information on the full range of /t/-deletion contexts.

input condition for the allomorph /-tjə/: it only attaches to stems in which the coronal non-continuant is preceded by a sonorant.

However, the situation is more complex with the forms that take the allomorph /-skə/. Given the general character of /t/-deletion in such phonological contexts, it is not plausible to assume that the final /t/ has undergone spirantization (/t/ → [s]). It is also not a very elegant solution to add a disjunction to the input specification, which includes /[Dorsal]t/ as a further context for /-skə/. A possible, though not very attractive solution would be to assume that /s/-epenthesis functions as some kind of repair mechanism in contexts in which the default form of the diminutive is realized in adjacency to a dorsal consonant on the surface. As already indicated above, there are no further parallel contexts for /s/-epenthesis. This rule would be confined to diminutives and would actually only be needed in the very few relevant cases in (22). A final, also not very attractive solution would be to split up diminutive formation in three steps:

- (23) “abstract diminutive formation” (/C.../[+front] ⇒ phonological rules ⇒ allomorphy selection

Those aspects of the diminutive that are required to feed or trigger the respective phonological rules are part of an abstract diminutive morpheme (i.e., the initial consonant and the umlaut feature); after the application of the phonological rules, the specific allomorphs are chosen. However, such a solution, which is usually not implemented in the morpheme-based lexical approach to morphology that I am pursuing here, should be justified on more phenomena than a few problematic cases of diminutive formation.

6. Summary

The previous sections have shown that Kleverlandish diminutive formation is affected by various general phonological rules: final devoicing, /g/-spirantization, /r/-vocalization and dorsal fricative assimilation. Since the diminutives trigger umlaut, a further umlaut/fronting rule comes into play. The four diminutive allomorphs are targeted differently by the various rules: the default form /-kə/ is affected least, whereas the allomorph /-skə/ is involved in a complex interaction of rules due to the fact that the coda of its base is subject to various rules. Stems ending in coronal consonants show the greatest variation in diminutive

formation in that all four allomorphs may occur – if the cases discussed in section 5 are included.

Two of the allomorphs, namely /-əkə/ and /-skə/, could be derived by respective epenthesis rules from the default form, whereas there is no obvious phonological relation between the allomorph /-tjə/ and the default form. However, since these epenthetic rules are diminutive-specific, their explanatory power is not much higher than the assumption of four lexical alternatives with specific input conditions. The lexical specification of the allomorphs is given in (24). ‘X’ denotes a segment, ‘V’ a stressed short vowel. Following general assumptions on input specificity, the allomorph with the most specific compatible input is selected in Kleverlandish diminutive formation.

- (24) *Lexical specification of the allomorphs*
- | | | | |
|-----------------|---|------------------------------------|-----------|
| /-kə/[+front]; |] | N.stem | — |
| /-skə/[+front]; | X | [Dorsal,+obstruent] |]N.stem — |
| /-əkə/[+front]; | V | X[Coronal,-obstruent,-continuant] |]N.stem — |
| /-tjə/[+front]; | X | [-obstruent]X[Coronal,-continuant] |]N.stem — |

Note that the specification for /-skə/ does not take into account the problematic /t/-deletion cases. Without further evidence that this pattern is productive in Kleverlandish, I leave the discussion to the aspects mentioned in section 5.

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