

Opacity in Šmartno Slovenian

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Supplementary materials

Appendix A: Nominal paradigms

Šmartno distinguishes three numbers and six cases. Dual is only contrastive in the nominative and accusative of the masculine and neuter paradigms; these are henceforth marked simply as dual. All other cases in the dual paradigm are identical to the respective plural cases.

All paradigms are organised into rows by number and case (the order of the latter is in line with the practice in Slavic (and Slovenian) linguistics), and into columns by number of syllables, underlying stress and stem-final consonant. With respect to stress, paradigms have three different types of surface realisation. Disyllabic stems with final stress and monosyllabic stems with underlying stress show identical patterns. This contrasts with disyllabic stems with penultimate stress and unstressed monosyllabic stems. Trisyllabic stems are grouped with the disyllabic ones. Syllabic nasals that are part of the stem contribute to stem length, and are counted as such (even though those nasals are non-syllabic in prevocalic contexts). Stems ending in voiced obstruents show devoicing in null-affix cases. Null suffixes – rather than no suffixes – are proposed here for certain cases, as is common in Slavic linguistics.

The paradigm variation is representative in terms of underlying stress, lengthening and voicing, but does not include all segmental alternations (e.g. morphological palatalisation, vowel fronting or metaphony), which are beyond the scope of this paper. The lists of stems by paradigm are not intended to be exhaustive, but rather to provide information about the extent of the material collected. In fact, many other nouns were encountered in the interviews, but because their full paradigms were not elicited, they are not included below.

Feminine I

In Feminine I, all cases except the nominative are syncretic in the singular.

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Feminine I by number of syllables, stress and final consonant

		<i>disyllabic final</i>		<i>disyllabic penultimate</i>	
		/kləba'sits/	/bə'sied/	/'smukuts/	/'jayod/
		'sausage'	'word'	'strawberry'	'berry'
<i>singular</i>					
NOM	/-a/	kləba'sitsa	bə'sieda	'smukutsa	'jayoda
other	/-I/	kləba'si:ts	bə'sie:d	'smukuts	'jayod
<i>plural</i>					
NOM	/-i/	kləba'si:ts	bə'sie:d	'smukuts	'jayod
GEN	/-Ø/	kləba'sits	bə'siet	'smukuts	'jayot
DAT	/-m/	kləba'sitsm̩	bə'siedm̩	'smukutsm̩	'jayodm̩
ACC	/-i/	kləba'si:ts	bə'sie:d	'smukuts	'jayod
LOC	/-iex/	kləba'sitsix	bə'siedix	'smukutsix	'jayodix
INSTR	/-m/	kləba'sitsm̩	bə'siedm̩	'smukutsm̩	'jayodm̩
		<i>monosyllabic stressed</i>		<i>monosyllabic unstressed</i>	
		/'xi/	/'mrieʒ/	/ərk/	/kɔz/
		'house'	'net'	'arm'	'goat'
<i>singular</i>					
NOM	/-a/	'xiʃa	'mrieʒa	ə'rkɑ	'kɔzɑ
other	/-I/	'xi:ʃ	'mrie:ʒ	ə:rk	'kɔ:z
<i>plural</i>					
NOM	/-i/	'xi:ʃ	'mrie:ʒ	ər'ki	kɔ'zi
GEN	/-Ø/	'xiʃ	'mrieʃ	ə'rk	'kɔs
DAT	/-m/	'xiʃm̩	'mrieʒm̩	ə'rk̩m̩	'kɔz̩m̩
ACC	/-i/	'xi:ʃ	'mrie:ʒ	ər'ki	kɔ'zi
LOC	/-iex/	'xiʃix	'mrieʒix	ər'kiex	kɔ'ziex
INSTR	/-m/	'xiʃm̩	'mrieʒm̩	ə'rk̩m̩	'kɔz̩m̩

Other Feminine I stems

disyllabic final:

/klə'bas/ 'sausage', /pra'sits/ 'female pig', /jɛrə'bits/ '(female) grouse'

disyllabic penultimate:

/'vievərts/ 'squirrel', /'fabrik/ 'factory', /'viper/ 'viper'

monosyllabic stressed:

/'lip/ 'linden tree', /'pup/ 'girl', /'tsiest/ 'road', /'rats/ 'duck', /'fretʃ/ 'luck', /'japk/ 'apple', /'wisk/ 'war', /'xruʃk/ 'pear', /'bæx/ 'flea', /'mɔk/ 'flour', /'ʒab/ 'frog', /'ʃɔb/ 'mushroom', /'rib/ 'fish', /'wəd/ 'water', /'brad/ 'beard', /'brajd/ 'field', /'krau/ 'cow', /'trav/ 'grass', /'niu/ 'field', /'lukɪ/ 'hole', /'zɛmɔ/ 'earth'

monosyllabic unstressed:

/nɔʃ/ 'leg', /ɣlav/ 'head', /ʒɛn/ 'wife, woman'

Feminine II

There are no clear instances of Feminine II stems with penultimate stress and monosyllabic stems that end in a voiced obstruent, but this is probably accidental.

Feminine II by number of syllables, stress and final consonant

		<i>disyllabic final</i>		<i>disyllabic penultimate</i>	
		/ka'kuoʃ/	/pɔ'mlad/	/'miləst/	
		'chicken'	'spring'	'grace'	
<i>singular</i>					
NOM	/-Ø/	ka'kuoʃ	pɔ'mlat	'miləst	
GEN	/-i/	ka'kuo:ʃ	pɔ'mla:d	'miləst	
DAT	/-I/	ka'kuo:ʃ	pɔ'mla:d	'miləst	
ACC	/-Ø/	ka'kuoʃ	pɔ'mlat	'miləst	
LOC	/-I/	ka'kuo:ʃ	pɔ'mla:d	'miləst	
INSTR	/-I/	ka'kuo:ʃ	pɔ'mla:d	'miləst	
<i>plural</i>					
NOM	/-i/	ka'kuo:ʃ	pɔ'mla:d	'miləst	
GEN	/-i/	ka'kuo:ʃ	pɔ'mla:d	'miləst	
DAT	/-m/	ka'kuoʃm̩	pɔ'mladm̩	'miləstm̩	
ACC	/-i/	ka'kuo:ʃ	pɔ'mla:d	'miləst	
LOC	/-iex/	ka'kuoʃix	pɔ'mladix	'miləstix	
INSTR	/-m/	ka'kuoʃm̩	pɔ'mladm̩	'miləstm̩	
		<i>monosyllabic stressed</i>		<i>monosyllabic unstressed</i>	
		/'ɣərʈʃ/		/luʈʃ/	/skərb/
		'udder'		'light'	'care'
<i>singular</i>					
NOM	/-Ø/	'ɣərʈʃ		'luʈʃ	'skərp
GEN	/-i/	'ɣər:ʈʃ		lu'tʃi	skə'rbi
DAT	/-I/	'ɣər:ʈʃ		'lu:ʈʃ	'skə:rb
ACC	/-Ø/	'ɣərʈʃ		'luʈʃ	'skərp
LOC	/-I/	'ɣər:ʈʃ		'lu:ʈʃ	'skə:rb
INSTR	/-I/	'ɣər:ʈʃ		'lu:ʈʃ	'skə:rb
<i>plural</i>					
NOM	/-i/	'ɣər:ʈʃ		lu'tʃi	skə'rbi
GEN	/-i/	'ɣər:ʈʃ		lu'tʃi	skə'rbi
DAT	/-m/	'ɣər:ʈʃm̩		lu'tʃm̩	skə'rʈm̩
ACC	/-i/	'ɣər:ʈʃ		lu'tʃi	skə'rbi
LOC	/-iex/	'ɣərʈʃix		lu'tʃiex	skə'rbiex
INSTR	/-m/	'ɣər:ʈʃm̩		lu'tʃm̩	skə'rʈm̩

*Other Feminine II stems**disyllabic final:*

/pe'rot/ 'wing', /po'fast/ 'monster', /mla'duost/ 'youth'

disyllabic penultimate:

/'ɔxtset/ 'wedding', /'pamet/ 'wisdom', /ɬu'bezn/ 'love'

monosyllabic stressed:

/'nit/ 'thread', /'rit/ 'ass', /'last/ 'ownership', /'smært/ 'death', /'miʃ/ 'mouse', /'dərʊ/ 'firewood'

monosyllabic unstressed:

/smət/ 'piece of trash', /mast/ 'fat', /ɣɔs/ 'goose', /vas/ 'village', /peʃ/ 'furnace', /uʃ/ 'lice', /jəd/ 'dish', /ərʒ/ 'rye', /lɛʒ/ 'lie', /sɔl/ 'salt', /stuar/ 'thing'

Masculine

Masculine nouns differ in terms of animacy; the accusative singular is syncretic with the genitive singular in animate ('anim') nouns but with the nominative singular in inanimate ('inanim') nouns. The evidence for stress in the accusative singular animate /-a/ can be seen in the form [mo'ʒa] 'man-ACC SG'.

In the data collected, Masculine is the most frequent paradigm by number of stems, although penultimate stress is rare.

Masculine by number of syllables, stress and final consonant

		<i>disyllabic final</i>		<i>disyllabic penultimate</i>	
		/vo'jak/	/la'bod/	/'lieʃnik/	/'madeʒ/
		'soldier	'swan	'hazelnut	'stain
<i>singular</i>					
NOM	/-Ø/	vo'jak	la'bot	'lieʃnik	'madeʃ
GEN	/-a/	vo'jaka	la'boda	'lieʃnika	'madeʒa
DAT	/-I/	vo'ja:k	la'bo:d	'lieʃnik	'madeʒ
ACC	/-a/ (anim)	vo'jaka	la'boda		
	/-Ø/ (inanim)			'lieʃnik	'madeʃ
LOC	/-I/	vo'ja:k	la'bo:d	'lieʃnik	'madeʒ
INSTR	/-m/	vo'jakm	la'bodm	'lieʃnikm	'madeʒm
<i>plural</i>					
NOM	/-i/	vo'ja:k	la'bo:d	'lieʃnik	'madeʒ
GEN	/-ɛw/	vo'jaku	la'bodu	'lieʃniku	'madeʒu
DAT	/-m/	vo'jakm	la'bodm	'lieʃnikm	'madeʒm
ACC	/-i/	vo'ja:k	la'bo:d	'lieʃnik	'madeʒ
LOC	/-iex/	vo'jakix	la'bodix	'lieʃnikix	'madeʒix
INSTR	/-m/	vo'jakm	la'bodm	'lieʃnikm	'madeʒm
<i>dual</i>	/-a/	vo'jaka	la'boda	'lieʃnika	'madeʒa

		<i>monosyllabic stressed</i>		<i>monosyllabic unstressed</i>	
		/ˈsmiex/	/ˈbriey/	/las/	/sniey/
		‘laughter’	‘riverbank’	‘hair’	‘snow’
<i>singular</i>					
NOM	/-Ø/	ˈsmiex	ˈbriex	ˈlas	ˈsniex
GEN	/-ˈa/	ˈsmiexa	ˈbrieya	laˈsa	sneˈya
DAT	/-I/	ˈsmiex	ˈbriey	ˈla:s	ˈsniey
ACC	/-ˈa/ (anim)				
	/-Ø/ (inanim)	ˈsmiex	ˈbriex	ˈlas	ˈsniex
LOC	/-I/	ˈsmiex	ˈbriey	ˈla:s	ˈsniey
INSTR	/-m/	ˈsmiexm	ˈbrieym	ˈlas̄m	ˈsnieym
<i>plural</i>					
NOM	/-i/	ˈsmiex	ˈbriey	laˈsi	sneˈyi
GEN	/-ˈɛw/	ˈsmiexu	ˈbrieyu	laˈsɛw	sneˈyɛw
DAT	/-m/	ˈsmiexm	ˈbrieym	ˈlas̄m	ˈsnieym
ACC	/-i/	ˈsmiex	ˈbriey	laˈsi	sneˈyi
LOC	/-ˈiex/	ˈsmiexix	ˈbrieyix	laˈsiex	sneˈyix
INSTR	/-m/	ˈsmiexm	ˈbrieym	ˈlas̄m	ˈsnieym
<i>dual</i>	/-a/	ˈsmiexa	ˈbrieya	ˈlasa	ˈsnieya

*Other Masculine stems**disyllabic final:*

/potˈplat/ (inanim) ‘sole’, /muˈdras/ (anim) ‘horned viper’, /yaˈlɔpts/ (inanim) ‘gallop’, /oˈtrɔk/ (anim) ‘child’, /tʃloˈviek/ (anim) ‘human’, /koˈrak/ (inanim) ‘step’, /jaˈzik/ (inanim) ‘tongue, language’, /obˈlak/ (inanim) ‘cloud’, /jeˈrab/ (anim) ‘male grouse’, /meˈdvied/ (anim) ‘bear’, /soˈsied/ (anim) ‘neighbour’, /miˈʃon/ ‘male mouse’

disyllabic penultimate:

/ˈarʒet/ (anim) ‘pocket’, /ˈtʂvern/ (inanim) ‘thread’

monosyllabic stressed:

/ˈsnɔp/ (inanim) ‘bundle’, /ˈrəp/ (inanim) ‘tail’, /ˈsərp/ (inanim) ‘sickle’, /ˈʃkəf/ (inanim) ‘bucket’, /ˈbrat/ (anim) ‘brother’, /ˈwrat/ (inanim) ‘neck’, /ˈzət/ (anim) ‘son-in-law’, /ˈsit/ (inanim) ‘sieve’, /ˈtat/ (anim) ‘thief’, /ˈpəs/ (anim) ‘dog’, /ˈnuos/ (inanim) ‘nose’, /ˈʒyɾɛpts/ (anim) ‘colt’, /ˈkɫutʃ/ (inanim) ‘key’, /ˈvuk/ (anim) ‘wolf’, /ˈbɔjk/ (inanim) ‘forest’, /ˈʃipk/ (inanim) ‘dog rose’, /ˈʃɛŋk/ (inanim) ‘gift’, /ˈmax/ (inanim) ‘moss’, /ˈdux/ (inanim) ‘smell’ (anim) ‘spirit’, /ˈxrib/ (inanim) ‘hill’, /ˈzob/ (inanim) ‘tooth’, /ˈɣrad/ (inanim) ‘castle’, /ˈzid/ (inanim) ‘wall’, /ˈmrɔz/ (inanim) ‘cold’, /ˈwəz/ (inanim) ‘cart’, /ˈpuʒ/ (anim) ‘snail’, /ˈjeʒ/ (anim) ‘hedgehog’, /ˈnuoʒ/ (inanim) ‘knife’, /ˈylaʒ/ (inanim) ‘jar’, /ˈruoɣ/ (inanim) ‘horn’, /ˈtʃrɛv/ (anim) ‘worm’, /ˈsier/ (inanim) ‘cheese’, /ˈsin/ (anim) ‘son’, /ˈdəʒj/ (inanim) ‘rain’

monosyllabic unstressed:

/lies/ (inanim) ‘wood’, /prax/ (inanim) ‘particle’, /moʒ/ (anim) ‘man’

Neuter

Disyllabic Neuter stems are extremely rare, with no examples of penultimate stress; stem-final voiced obstruents are rare in disyllables.

Neuter stems are subject to many stem-specific alternations, such as final coronal deletion in the nominative singular and vowel fronting in the nominative and accusative singular.

Neuter by number of syllables, stress and final consonant

		<i>disyllabic final</i>		<i>disyllabic penultimate</i>	
		/ko'lien/		/'jezer/	
		'knee'		'lake'	
<i>singular</i>					
NOM	/-'uo/	ko'lieno		'jezero	
GEN	/-'a/	ko'liena		'jezera	
DAT	/-I/	ko'liem		'jezer	
ACC	/-'uo/	ko'lieno		'jezero	
LOC	/-I/	ko'liem		'jezer	
INSTR	/-m/	ko'liem̩		'jezer̩	
<i>plural</i>					
NOM	/-I/	ko'liem		'jezer	
GEN	/-'ɔw/	ko'lienu		'jezeru	
DAT	/-m/	ko'liem̩		'jezer̩	
ACC	/-I/	ko'liem		'jezer	
LOC	/-ix/	ko'lienix		'jezerix	
INSTR	/-m/	ko'liem̩		'jezer̩	
<i>dual</i>	/-'a/	ko'liena		'jezera	
		<i>monosyllabic stressed</i>		<i>monosyllabic unstressed</i>	
		/'miest/	/'ɣniezd/	/zlat/	/'blay/
		'town'	'nest'	'gold'	'fabric'
<i>singular</i>					
NOM	/-'uo/	'miesto	'ɣniezdo	zla'tuo	bla'yuo
GEN	/-'a/	'miesta	'ɣniezda	zla'ta	bla'ya
DAT	/-I/	'miest	'ɣniezd	'zla:t	'bla:y
ACC	/-'uo/	'miesto	'ɣniezdo	zla'tuo	bla'yuo
LOC	/-I/	'miest	'ɣniezd	'zla:t	'bla:y
INSTR	/-m/	'miest̩	'ɣniezd̩	'zlat̩	'blay̩
<i>plural</i>					
NOM	/-I/	'miest	'ɣniezd	'zla:t	'bla:y
GEN	/-'ɔw/	'miestu	'ɣniezdu	zla'tɔw	bla'ɔw
DAT	/-m/	'miest̩	'ɣniezd̩	'zlat̩	'blay̩
ACC	/-I/	'miest	'ɣniezd	'zla:t	'bla:y
LOC	/-ix/	'miestix	'ɣniezdix	'zlatix	'blayix
INSTR	/-m/	'miest̩	'ɣniezd̩	'zlat̩	'blay̩
<i>dual</i>	/-'a/	'miesta	'ɣniezda	zla'ta	bla'ya

*Other Neuter stems**disyllabic final:*

/ko'pɪt/ 'hoof', /ɔ̃gre:'bɛt/ 'foal', /te'lat/ 'calf', /i'mɛn/ 'name', /pə'fɛn/
'wheat'

monosyllabic stressed:

/'lɛt/ 'year', /'ʊst/ (*plurale tantum*) 'mouth', /'sɛrtʰs/ 'heart', /'ɪts/ 'egg',
/'pʌʊtʃ/ (*plurale tantum*) 'lung', /'mlɛk/ 'milk', /'puːl/ 'field'

monosyllabic unstressed:

/məs/ 'meat', /nɛb/ (*singulare tantum*) 'sky', /tʃərəv/ 'intestine', /sɛn/
'hay'

	disyllabic		monosyllabic		<i>sum</i>
	final	penultimate	stressed	unstressed	
Feminine I	5	5	23	5	38
Feminine II	5	4	7	13	29
Masculine	14	4	36	5	59
Neuter	6	1	9	6	22
<i>sum</i>	30	14	75	29	148

Table VII

Count of nominal stems, by paradigm.

Appendix B: List of stimuli

The stimuli were presented to the participants using the orthography of Standard Slovenian. They are given below in the order in which they appeared in the elicitation experiment. Items with two entries show lexical variation across speakers. Trisyllabic stems are classified with disyllabic ones. See footnote 10 for discussion of item 4.

	<i>SR</i>	<i>UR</i>	<i>Gloss</i>	<i>Paradigm</i>
1	'noɣa	/'noɣ-a/	'leg-NOM SG'	trial
2	'miesta	/'miest-'a/	'town-GEN SG'	trial
3	'xiɸm	/'xiɸ-m/	'house-INSTR PL'	trial
4	'ɣniest	/'ɣniezd-Ø/	'nest-GEN PL'	N monosyllabic stressed
5	'brat	/'brad-Ø/	'beard-GEN PL'	F1 monosyllabic stressed
6	'ri:ɸ	/'riɸ-'i/	'fish-NOM PL'	F1 monosyllabic stressed
7	'wrat	/'wrat-Ø/	'neck-NOM SG'	M monosyllabic stressed
8	'jayot	/'jayod-Ø/	'berry-GEN PL'	F1 disyllabic penultimate
	'smukuts	/'smukuts-Ø/	'strawberry-GEN PL'	F1 disyllabic penultimate
9	'brɑ:d	/'brad-'i/	'beard-NOM PL'	F1 monosyllabic stressed
10	'pup	/'pup-Ø/	'girl-GEN PL'	F1 monosyllabic stressed
11	'wra:t	/'wrat-'i/	'neck-NOM PL'	M monosyllabic stressed
12	la'bod	/la'bod-I/	'swan-DAT SG'	M disyllabic final
13	'ɸlife	/'sɸife/	'hear-3SG'	filler
14	po'mla:d	/po'mlad-'i/	'spring-GEN SG'	F2 disyllabic final
15	la'bot	/la'bod-Ø/	'swan-NOM SG'	M disyllabic final
16	'ɰap	/'ɰab-Ø/	'frog-GEN PL'	F1 monosyllabic stressed
17	'vieværtɰm	/'vieværtɰ-m/	'squirrel-INSTR PL'	filler
18	'xiɸm	/'xiɸ-m/	'house-INSTR PL'	filler
19	'ɣniezd	/'ɣniezd-I/	'nest-NOM PL'	N monosyllabic stressed
20	pe'ro:t	/pe'rot-'i/	'wing-GEN SG'	F2 disyllabic final
21	'xiɸ	/'xiɸ-Ø/	'house-GEN PL'	F1 monosyllabic stressed
22	'pamet	/'pamet-'i/	'wisdom-GEN SG'	F2 disyllabic penultimate
23	bə'siet	/bə'sied-Ø/	'word-GEN PL'	F1 disyllabic final
24	je'rap	/je'rab-Ø/	'grouse-NOM SG'	M disyllabic final
	jera'bits	/jera'bits-Ø/	'grouse-GEN PL'	F1 disyllabic final
25	'xi:ɸ	/'xiɸ-'i/	'house-NOM PL'	F1 monosyllabic stressed
26	'miɸ	/'miɸ-Ø/	'mouse-NOM SG'	F2 monosyllabic stressed
27	je'rab	/je'rab-I/	'grouse-DAT SG'	M disyllabic final
	jera'bits	/jera'bits-I/	'grouse-DAT SG'	F1 disyllabic final
28	'puɸ	/'puɰ-Ø/	'snail-NOM SG'	M monosyllabic stressed
29	'ɣɔ:b	/'ɣɔb-'i/	'mushroom-NOM PL'	F1 monosyllabic stressed
30	'nit	/'nit-I/	'thread-DAT SG'	F2 monosyllabic stressed
	'tɰvern	/'tɰvern-I/	'thread-DAT SG'	filler
31	pot'plat	/pot'plat-I/	'sole-DAT SG'	M disyllabic final
32	'wət	/'wəd-Ø/	'water-GEN PL'	F1 monosyllabic stressed
33	'mo:ɰ	/moɰ-I/	'husband-LOC SG'	M monosyllabic unstressed
34	'wəz	/'wəz-I/	'cart-DAT SG'	M monosyllabic stressed
35	'nit	/'nit-Ø/	'thread-NOM SG'	F2 monosyllabic stressed
	'tɰvern	/'tɰvern-Ø/	'thread-NOM SG'	filler

36	pot'plat	/pot'plat-Ø/	'sole-NOM SG'	M disyllabic final
37	bə'sie:d	/bə'sied-'i/	'word-NOM PL'	F1 disyllabic final
38	'ʒa:b	/'ʒab-I/	'frog-DAT SG'	F1 monosyllabic stressed
39	'pu:ʒ	/'puʒ-I/	'snail-DAT SG'	M monosyllabic stressed
40	'sit	/'sit-I/	'sieve-LOC SG'	M monosyllabic stressed
41	'də:ʒ	/'dəʒ-I/	'rain-LOC SG'	filler
42	ka'kuo:f	/ka'kuof-'i/	'chicken-NOM PL'	F2 disyllabic final
43	'vievərts	/'vievərts-Ø/	'squirrel-GEN PL'	F1 disyllabic penultimate
44	'madeʒ	/'madeʒ-Ø/	'stain-NOM SG'	M disyllabic penultimate
45	'snɔ:p	/'snɔp-I/	'bundle-DAT SG'	M monosyllabic stressed
46	'jəʊd	/'jəʊd-'i/	'berry-NOM PL'	F1 disyllabic penultimate
	'smukuts	/'smukuts-'i/	'strawberry-NOM PL'	F1 disyllabic penultimate
47	'sit	/'sit-Ø/	'sieve-NOM SG'	M monosyllabic stressed
48	pe'rot	/pe'rot-Ø/	'wing-NOM SG'	F2 disyllabic final
49	'ɣlaf	/'ɣlaf-Ø/	'jar-NOM SG'	M monosyllabic stressed
50	'mrie:ʒ	/'mrieʒ-'i/	'net-NOM PL'	F1 monosyllabic stressed
51	'fijemo	/'fijemo/	'dry-1PL'	filler
52	'ɣla:ʒ	/'ɣlaʒ-I/	'jar-DAT SG'	M monosyllabic stressed
53	klə'bas	/klə'bas-Ø/	'sausage-GEN PL'	F1 disyllabic final
	kləba'sits	/kləba'sits-Ø/	'sausage-GEN PL'	F1 disyllabic final
54	klə'bas	/klə'bas-'i/	'sausage-NOM PL'	F1 disyllabic final
	kləba'sits	/kləba'sits-'i/	'sausage-NOM PL'	F1 disyllabic final
55	'skərp	/skərb-Ø/	'care-NOM SG'	F2 monosyllabic unstressed
56	'rəp	/'rəp-I/	'tail-DAT SG'	M monosyllabic stressed
57	'nit	/'nit-'i/	'thread-GEN SG'	F2 monosyllabic stressed
	'tsuerna	/'tsuern-'a/	'thread-GEN SG'	filler
58	poʒ'ɣrəm	/poʒ'ɣrəm/	'swallow-1SG'	filler
59	'pamet	/'pamet-Ø/	'wisdom-NOM SG'	F2 disyllabic penultimate
60	'jeʒ	/'jeʒ-Ø/	'hedgehog-NOM SG'	M monosyllabic stressed
61	'wə:d	/'wə:d-'i/	'water-NOM PL'	F1 monosyllabic stressed
62	'je:ʒ	/'jeʒ-I/	'hedgehog-DAT SG'	M monosyllabic stressed
63	'vievərts	/'vievərts-'i/	'squirrel-NOM PL'	F1 disyllabic penultimate
64	'wəs	/'wəz-Ø/	'cart-NOM SG'	M monosyllabic stressed
65	'skə:rb	/skərb-I/	'care-DAT SG'	F2 monosyllabic unstressed
66	'rəp	/'rəp-Ø/	'tail-NOM SG'	M monosyllabic stressed
67	'madeʒ	/'madeʒ-'i/	'stain-NOM PL'	M disyllabic penultimate
68	ka'kuof	/ka'kuof-Ø/	'chicken-NOM SG'	F2 disyllabic final
69	ʧlo'vie:k	/ʧlo'viek-I/	'human-DAT SG'	filler
70	'vievərtsa	/'vievərts-a/	'squirrel-NOM SG'	filler
71	'snɔp	/'snɔp-Ø/	'bundle-NOM SG'	M monosyllabic stressed
72	po'mlat	/po'mlad-Ø/	'spring-NOM SG'	F2 disyllabic final
73	'rip	/'rib-Ø/	'fish-GEN PL'	F1 monosyllabic stressed
74	'mi:f	/'mi:f-'i/	'mouse-GEN SG'	F2 monosyllabic stressed
75	'mrieʒ	/'mrieʒ-Ø/	'net-GEN PL'	F1 monosyllabic stressed
76	'moʒ	/moʒ-Ø/	'husband-NOM SG'	M monosyllabic unstressed
77	'pu:p	/'pu:p-'i/	'girl-NOM PL'	F1 monosyllabic stressed
78	'ɣɔp	/'ɣɔb-Ø/	'mushroom-GEN PL'	F1 monosyllabic stressed

Appendix C: Minimally distinct pairs in the list of stimuli**Final stress, underlyingly voiceless**

<i>no deletion</i>	<i>deletion</i>	
'wrat	'wra:t	'neck-NOM SG/NOM PL'
'pup	'pu:p	'girl-GEN PL/NOM PL'
pe'rɔt	pe'rɔ:t	'wing-NOM SG/GEN SG'
'xiʃ	'xi:f	'house-GEN PL/NOM PL'
jera'bits	jera'bits	'grouse-GEN PL/DAT SG'
'miʃ	'mi:f	'mouse-NOM SG/GEN SG'
'nit	'ni:t	'thread-NOM SG/DAT SG-GEN SG'
pot'plat	pot'plɑ:t	'sole-NOM SG/DAT SG'
'sit	'si:t	'sieve-NOM SG/LOC SG'
kə'kuɔʃ	kə'kuo:f	'chicken-NOM SG/NOM PL'
'snɔp	'snɔ:p	'bundle-NOM SG/DAT SG'
klə'bas	klə'ba:s	'sausage-GEN PL/NOM PL'
kləba'sits	kləba'si:ts	'sausage-GEN PL/NOM PL'
'rəp	'rə:p	'tail-NOM SG/DAT SG'

Final stress, underlyingly voiced

<i>no deletion</i>	<i>deletion</i>	
'ɲniest	'ɲnie:zd	'nest-GEN PL/NOM PL'
'brat	'bra:d	'beard-GEN PL/NOM PL'
'rip	'ri:b	'fish-GEN PL/NOM PL'
la'bot	la'bo:d	'swan-NOM SG/DAT SG'
po'mlat	po'mlɑ:d	'spring-NOM SG/GEN SG'
'ʒap	'ʒa:b	'frog-GEN PL/DAT SG'
'jera:p	'jera:b	'grouse-NOM SG/DAT SG'
'puʃ	'pu:ʒ	'snail-NOM SG/DAT SG'
'ɣɔp	'ɣɔ:b	'mushroom-GEN PL/NOM PL'
'wət	'wə:d	'water-GEN PL/NOM PL'
'moʃ	'mo:ʒ	'husband-NOM SG/LOC SG'
'wəs	'wə:z	'cart-NOM SG/DAT SG'
bə'siet	bə'sie:d	'word-GEN PL/NOM PL'
'ɣlɑʃ	'ɣlɑ:ʒ	'jar-NOM SG/DAT SG'
'mrieʃ	'mrie:ʒ	'net-GEN PL/NOM PL'
'skərp	'skə:rɔ	'care-NOM SG/DAT SG'
'jeʃ	'je:ʒ	'hedgehog-NOM SG/DAT SG'

Penultimate stress

<i>no deletion</i>	<i>deletion</i>	
'jayɔt	'jayɔd	'berry-GEN PL/NOM PL'
'smukuts	'smukuts	'strawberry-GEN PL/NOM PL'
'vieuərts	'vieuərts	'squirrel-GEN PL/NOM PL'
'pamet	'pamet	'wisdom-NOM SG/GEN SG'
'madeʃ	'madeʒ	'stain-NOM SG/NOM PL'