Specifications and Notation for MULTEXT-East Lexicon Encoding

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Foreword

The purpose of this document is to (i) provide harmonised lexical specifications for eight languages — Bulgarian, Croatian, Czech, Estonian, English, Hungarian, Romanian, Slovene — and (ii) formulate the relevant notation that is used in the lexicons and annotated corpora contributed by the language groups.

This edition of the lexical specifications is the revised and expanded version of the MULTEXT-East report D11F. This report was, in turn, based on two proposals of lexicon specifications presented in the Multext D1-6-1B Deliverable of the Multext Project (Bel, Calzolari and Monachini eds. 1995) and in the Eagles document of the Lexicon sub-group on Morphosyntactic annotation (Monachini and Calzolari 1995).

The current 'Concede' version offers the addition of a new language, Croatian, and additions (for Romanian and Slovene) to the common tables in terms of attributes and values. The tables for Slovene have also been localised. The LaTeX document has been converted to Latin-2 encoding, so that the language specific characters are correctly displayed in print and in the HTML version of this document.

Pisa, October 1995

Ljubljana, December 1997

Ljubljana, March 2001

Contents

Chapter 1

Background

1.1 Description of the proposal

The proposal has been prepared in the Multext table format, which displays the specifications (as sets of attribute-values, see below for further details about the notation), with their respective codes used to mark them in the lexicons. Two types of features are distingished:

(i) the minimal *core features*
These are shared by most of the languages and appear at the top of the list of features — they are deliniated by a row of asterisks (*). We tried to keep this set in common to all the Multext and Multext-East languages. In such a way, the comparability across the information encoded in the lexical lists of Central & Eastern and of the six original Multext languages is to a certain extent ensured. A side-effect is that certain values are present in the tables, although none of the MULTEXT-East languages makes used of them/

(ii) the Multext-East *language-specific features*
These are shared by the Multext-East languages, but differ from the Multext ones. The formulation of this set has been, as already mentioned, highly delicate, due also to the fact that many language-specific values were presented in the applications and sometimes the same (or 'similar enough') morphosyntactic phenomena were referred to with two different attribute or value names. The phase of recognition and harmonisation of the semantics of some attributes, values and naming conventions has, hence, required much effort.

This representation, with the concrete applications which display and exemplify the attributes and values and provide their internal constraints and relationships, makes the proposal self-explanatory. Other groups can easily test the specifications on their language, simply by following the method of the applications. The possibility of incorporating idiosyncratic classes and distinctions after the common core features makes the proposal relatively adaptable and flexible, without compromising compatibility.

1.2 Lexical lists

The specifications presented here have been used in the encoding of word-form lexica of the languages. These lexica contain one entry per line, where an entry has the following form:

word-form ⟨TAB⟩ lemma ⟨TAB⟩ **morphosyntactic description**

This reports describes the morphosyntactic descriptions used in the lexica and also in the annotated multilingual corpus.

1.3 Notation

In Multext the notation has been chosen following current practices for NLP, where information is represented in attribute-value formalisms and following the idea that it should also be self-informative for human understanding. At the same time, a relativelly compact encoding was maintained. The notation format has the following main characteristics:

- attributes are marked by positions;
- values are represented by a single character;
- a special marker reflects the non applicability of a given attribute.

These characteristics make the proposed lexical notation similar to attribute-value pairs used in unification based formalisms (see the Multext D1-6-1B Deliverable for further details).

The linear strings of characters representing the morphosyntactic descriptions are constructed following the philosophy of the Intermediate Format proposed in the Eagles Corpus proposal (Leech and Wilson, 1994), i.e. of having agreed symbols in predefined and fixed positions: the positions of a string of characters are numbered 0, 1, 2, etc. in the following way:

a. the agreed character at position 0 encodes part-of-speech;

b. each character at position 1, 2, n, encodes the value of one attribute (person, gender, number, etc.);

c. if an attribute does not apply, the corresponding position in the string contains a special marker, the hyphen ('-').

Example: `Ncms- (Noun, common, masculine, singular, nocase)`

This notation adopts the Eagles Intermediate Format with a small revision: the Intermediate Format encodes information by means of digits, while in Multext characters of a mnemonic nature are preferred.

The marker '-' has a special semantics and it means 'not-applicable'. As stated above, its function is to keep the relationship established between attributes and values. It is used in the following cases:

(a) not relevant *to a particular language*, e.g. Gender to Estonian.

(b) not applicable *to a particular combination of attribute-values*, i.e. although the attribute is used by a category in a given language it does not apply to a particular subclass of the category; e.g., Person applies to Pronouns, but not to the Type demonstrative.

(c) not applicable *to a particular lexical item*, i.e. although the attribute applies to the rest of its paradigm, e.g., Gender in the paradigm of English Personal Pronouns applies only to the 3rd person, *I, you* vs. *she, he*).

Finally, it should be noted that in the lexica trailing hyphens have been omitted, as this often leads to a more compact encoding. Hence codes like `Ncms-` are written as `Ncms`.

1.4 Organization of the language-specific chapters

The applications of the proposal to the individual eight languages are then given in Chapter II. The language application parts present the lexicon specifications category by category and are structured as follows:

(a) a chapter describing the features and values pertinent to a given category in the form of tables with examples from the language in question; these tables have been mostly automatically generated from the common tables. The language specific tables, however, do often have significant additional information, e.g. examples or localisation of names.

(b) a chapter providing the allowed combinations of values for the particular language, which is, in some cases, supplemented by c) a list of examples from the lexicon or corpus.

Two different strategies of displaying combinations have been followed:

(i) all the *admitted* combinations are provided together with an example. This has the disadvantage of producing big lists, given the high number of features and values to combine together, but the advantage of providing the only legal combinations with the relevant constraints in the application of some features/values in presence of other features or values or combination of them (see e.g Gender in Personal Pronouns).

(ii) a mathematical expression (essentially a regular expression) describing the combinations is provided, which can subsequently used to generate *all* combinations, possibly including some which are not valid.

Part I

Common Morphosyntactic Specifications

Chapter 2

Table of categories

Part-of-Speech	Code	Atts
Noun	N	10
Verb	V	14
Adjective	A	12
Pronoun	P	17
Determiner	D	10
Article	T	5
Adverb	R	6
Adposition	S	4
Conjunction	C	7
Numeral	M	12
Interjection	I	2
Residual	X	0
Abbreviation	Y	5
Particle	Q	3

Each category acts a type, i.e. it introduces attribute value pairs. The equivalence of a particular attribute-value at a particular position in a morpho-syntactic description is thus defined only with respect to a given category.

The attributes and the values pertinent to the above categories are presented in the the first 14 sections of the next chapter. The final two sections list the values and attributes defined in the tables.

Chapter 3

Tables of attribute-values

The common Multext-East tables of attribute values are given for all categories above and have a rigid structure, which makes them suitable for automatically verifying the conformance of a particular morphosyntactic description with the tables, or for expanding a morphosyntactic description into its more verbose form.

At the beginning of each category the number of attributes introduced by the category is given. This is followed by a string summarizing the valid attributes of the category. The features constituting the minimal core, in common with Multext (and Eagles) are graphically contained between strings of stars (*).

This information is followed by the table proper. The table has the following columns:

1. **Position** gives the position of the attribute in the string of the morphosyntactic description;
2. **Attribute** gives the name of the attribute;
3. **Value** gives the name and one-letter code of the attribute-value;
4. **en, ro, sl, cs, bg, et, hu, hr** i.e. a column for each of the languages. For easier comparison between them they have been grouped by language family: first English as the 'hub' language, then Romance (Romanian), followed by Slavic (Slovene, Czech, Bulgarian), and finaly Finno-Ungric (Estonian, Hungarian). Croation has been added later, and not yet grouped.

The language columns define (by marking with 'x'), in the first line, whether the category is used by the language, and in subsequent lines, which attribute-values a particular language uses.

3.1 Noun (N)

11 Positions

```
**** **** **** **** **** ---- ---- ---- ---- ---- ----
PoS  Type Gend Numb Case Def  Cltc Anim OwnN OwnP OwdN
**** **** **** **** **** ---- ---- ---- ---- ---- ----
```

P	ATT	VAL	C	EN	RO	SL	CS	BG	ET	HU	HR
P	ATT	VAL	C	x	x	x	x	x	x	x	x
1	Type	common	c	x	x	x	x	x	x	x	x
		proper	p	x	x	x	x	x	x	x	x
2	Gender	masculine	m	x	x	x	x	x			x
		feminine	f	x	x	x	x	x			x
		neuter	n	x	x	x	x	x			x
3	Number	singular	s	x	x	x	x	x	x	x	x
		plural	p	x	x	x	x	x	x	x	x
		dual	d			x	x				
		count	t					x			
4	Case	nominative	n			x	x	x	x	x	x
		genitive	g			x	x		x	x	x
		dative	d			x	x			x	x
		accusative	a			x	x			x	x
		vocative	v		x		x	x			x
		locative	l			x	x				x
		instrumental	i			x	x			x	x
		direct	r		x						
		oblique	o		x						
		partitive	1						x		
		illative	x						x	x	
		inessive	2						x	x	
		elative	e						x	x	
		allative	t						x	x	
		adessive	3						x	x	
		ablative	b						x	x	
		translative	4						x		
		terminative	9						x	x	
		essive	w						x	x	
		abessive	5						x		
		komitative	k						x		
		aditive	7						x		
		temporalis	m							x	
		causalis	c							x	
		sublative	s							x	
		delative	h							x	
		sociative	q							x	
		factive	y							x	
		superessive	p							x	

P	ATT	VAL	C	EN	RO	SL	CS	BG	ET	HU	HR
		distributive	u							x	
5	Definiteness	no	n		x			x			
		yes	y		x			x			
		short_art	s					x			
		full_art	f					x			
6	Clitic	no	n		x						
		yes	y		x						
7	Animate	no	n			x	x			x	x
		yes	y			x	x			x	x
8	Owner_Number	singular	s							x	
		plural	p							x	
9	Owner_Person	first	1							x	
		second	2							x	
		third	3							x	
10	Owned_Number	singular	s							x	
		plural	p							x	
				EN	RO	SL	CS	BG	ET	HU	HR

3.2 Verb (V)

15 Positions

PoS	Type	VFrm	Tens	Pers	Numb	Gend	Voic	Neg	Def	Cltc	Case	Anim	Clt2	Aspt

P	ATT	VAL	C	EN	RO	SL	CS	BG	ET	HU	HR
1	Type	main	m	x	x	x	x	x	x	x	x
		auxiliary	a	x	x	x	x	x	x	x	x
		modal	o	x	x	x	x		x		x
		copula	c		x	x	x				x
		base	b	x							
2	VForm	indicative	i	x	x	x	x	x	x	x	x
		subjunctive	s		x						
		imperative	m		x	x	x	x	x	x	x
		conditional	c	x		x	x		x	x	x
		infinitive	n	x	x	x	x		x	x	x
		participle	p	x	x	x	x	x	x		x
		gerund	g		x			x	x		
		supine	u			x			x		
		transgressive	t				x				
		quotative	q						x		
3	Tense	present	p	x	x	x	x	x	x	x	x
		imperfect	i		x			x	x		x
		future	f			x	x				x
		past	s	x	x	x	x	x	x	x	x
		pluperfect	l		x						x
		aorist	a					x			x
4	Person	first	1	x	x	x	x	x	x	x	x
		second	2	x	x	x	x	x	x	x	x
		third	3	x	x	x	x	x	x	x	x
5	Number	singular	s	x	x	x	x	x	x	x	x
		plural	p	x	x	x	x	x	x	x	x
		dual	d			x					
6	Gender	masculine	m		x	x	x	x			x
		feminine	f		x	x	x	x			x
		neuter	n		x	x	x	x			x
7	Voice	active	a			x	x	x	x		x
		passive	p			x	x	x	x		x
8	Negative	no	n			x	x		x		x
		yes	y			x	x		x		x

P ATT	VAL	C	EN	RO	SL	CS	BG	ET	HU	HR
9 Definiteness	no	n					x		x	
	yes	y					x		x	
	short_art	s					x			
	full_art	f					x			
	1s2s	2							x	
10Clitic	no	n		x						
	yes	y		x						
11Case	nominative	n								
	genitive	g								
	dative	d								
	accusative	a								
	locative	l								
	instrumental	i								
	illative	x						x		
	inessive	2						x		
	elative	e						x		
	translative	4						x		
	abessive	5						x		
12Animate	no	n				x				
	yes	y				x				
13Clitic_s	no	n				x				
	yes	y				x				
14Aspect	progressive	p			x					
	perfective	e			x					

3.3 Adjective (A)

13 Positions

PoS	Type	Degr	Gend	Numb	Case	Def	Cltc	Anim	Form	OwnN	OwnP	OwdN

P ATT	VAL	C	EN	RO	SL	CS	BG	ET	HU	HR
			x	x	x	x	x	x	x	x
1 Type	qualificative	f	x	x	x	x			x	x
	indefinite	i								
	possessive	s			x	x				x
	ordinal	o			x					
2 Degree	positive	p	x	x	x	x		x	x	x
	comparative	c	x	x	x	x		x	x	x
	superlative	s	x	x	x	x		x	x	x
	elative	e			x					
3 Gender	masculine	m		x	x	x	x			x
	feminine	f		x	x	x	x			x
	neuter	n		x	x	x	x			x
4 Number	singular	s		x	x	x	x	x	x	x
	plural	p		x	x	x	x	x	x	x
	dual	d			x	x				
5 Case	nominative	n			x	x		x	x	x
	genitive	g			x	x		x	x	x
	dative	d			x	x			x	x
	accusative	a			x	x			x	x
	vocative	v		x		x				x
	locative	l			x	x				x
	instrumental	i			x	x			x	x
	direct	r		x						
	oblique	o		x						
	partitive	1						x		
	illative	x						x	x	
	inessive	2						x	x	
	elative	e						x	x	
	allative	t						x	x	
	adessive	3						x	x	
	ablative	b						x	x	
	translative	4						x		
	terminative	9						x	x	
	essive	w						x	x	
	abessive	5						x		
	komitative	k						x		
	aditive	7						x		
	temporalis	m							x	

	causalis	c							x	
	sublative	s							x	
	delative	h							x	
	sociative	q							x	
	factive	y							x	
	superessive	p							x	
	distributive	u							x	
	essive_formal	f							x	
6 Definiteness	no	n		x	x		x			x
	yes	y		x	x		x			x
	short_art	s					x			
	full_art	f					x			
7 Clitic	no	n		x						
	yes	y		x						
8 Animate	no	n			x	x			x	x
	yes	y			x	x			x	x
9 Formation	nominal	n				x				
	compound	c				x				
10Owner_Number	singular	s							x	
	plural	p							x	
11Owner_Person	first	1							x	
	second	2							x	
	third	3							x	
12Owned_Number	singular	s							x	
	plural	p							x	
			EN	RO	SL	CS	BG	ET	HU	HR

3.4 Pronoun (P)

18 Positions

```
**** **** **** **** **** **** **** **** ---- ---- ---- ---- ---- ---- ...
PoS  Type Pers Gend Numb Case OwnN OwnG Cltc RefT SynT Def  Anim Clt2
**** **** **** **** **** **** **** **** ---- ---- ---- ---- ---- ---- ...
 ... ---- ---- ---- ----
     PrFr OwnP OwdN WhT
 ... ---- ---- ---- ----
```

P ATT	VAL		C	EN	RO	SL	CS	BG	ET	HU
			=	EN	RO	SL	CS	BG	ET	HU
P ATT	VAL		C	x	x	x	x	x	x	x
1 Type	personal		p	x	x	x	x	x	x	x
	demonstrative		d		x	x	x	x	x	x
	indefinite		i		x	x	x	x	x	x
	possessive		s	x	x	x	x	x	x	x
	interrogative		q	x		x	x	x	x	x
	relative		r	x		x	x	x	x	x
	exclamative		e							
	reflexive		x	x	x	x	x	x	x	x
	reciprocal		y						x	x
	negative		z		x	x	x	x		
	general		g	x		x	x	x		
	int_rel		w		x					
	emphatic		h		x					
	determinal		m						x	
	ex_there		t	x						
2 Person	first		1	x	x	x	x	x	x	x
	second		2	x	x	x	x	x	x	x
	third		3	x	x	x	x	x	x	x
3 Gender	masculine		m	x	x	x	x	x		
	feminine		f	x	x	x	x	x		
	neuter		n	x	x	x	x	x		
4 Number	singular		s	x	x	x	x	x	x	x
	plural		p	x	x	x	x	x	x	x
	dual		d			x	x			
5 Case	nominative	*	n	x	x1	x	x	x	x	x
	genitive	*	g		x2	x	x		x	x
	dative	*	d		x2	x	x	x		x
	accusative	*	a	x	x1	x	x	x		x
	vocative		v		x					
	locative		l			x	x			
	instrumental		i			x	x			x
	direct	*	r		xR1					
	oblique	*	o		xR2					
	partitive		1						x	

	illative	x						x	x	
	inessive	2						x	x	
	elative	e						x	x	
	allative	t						x	x	
	adessive	3						x	x	
	ablative	b						x	x	
	translative	4						x		
	terminative	9						x	x	
	essive	w						x	x	
	abessive	5						x		
	komitative	k						x		
	aditive	7						x		
	temporalis	m							x	
	causalis	c							x	
	sublative	s							x	
	delative	h							x	
	sociative	q							x	
	factive	y							x	
	superessive	p							x	
	distributive	u							x	
	essive_formal	f							x	
6 Owner_Number	singular	s	x	x	x	x			x	
	plural	p	x	x	x	x			x	
	dual	d			x					
7 Owner_Gender	masculine	m	x		x	x				
	feminine	f	x		x	x				
	neuter	n			x	x				
********************************			EN	RO	SL	CS	BG	ET	HU	HR
8 Clitic	no	n		x	x	x	x			
	yes	y		x	x	x	x			
	bound	b			x					
9 Referent_Type	personal	p			x	x	x			
	possessive	s			x	x	x			
	attributive	a					x			
	quantitative	q					x			
10Syntactic_Type	nominal	n			x	x				
	adjectival	a			x	x				
	adverbial	r			x					
11Definiteness	no	n					x			
	yes	y					x			
	short_art	s					x			
	full_art	f					x			
12Animate	no	n			x	x				
	yes	y			x	x				
13Clitic_s	yes	y				x				
	no	n				x				

14Pronoun_Form	strong	s		x					
	weak	w		x					
15Owner_Person	first	1							x
	second	2							x
	third	3							x
16Owned_Number	singular	s							x
	plural	p							x
17Wh_Type	relative	r	x						
	question	q	x						
=================================			EN	RO	SL	CS	BG	ET	HU

Notes

* In the Romanian case system the value 'direct' conflates 'nominative' and 'accusative', while the value 'oblique' conflates 'genitive' and 'dative'.

If we want to list these values as belonging to the same Case universe, i.e. if we want either 'direct', 'nominative' and 'accusative' or 'oblique', 'genitive' and 'dative' appear all together in the same system, their semantics should be explained and their internal relationships represented. We suggest here to follow the same strategy adopted within the Eagles validation exercise, where different kinds of relationships between values have been formally represented by adding indexes to the values of interest:

- in this example, the kind of relation 'direct' and 'oblique' have with other values of the system is of 'replacement'. We mark this labelling 'direct' and 'oblique' with the index 'R' and adding the numerical indexes 1 to 'direct' and 2 to 'oblique', which point to the values which are respectively replaced.

3.5 Determiner (D)

11 Positions

```
**** **** **** **** **** **** **** **** ---- ---- ----
PoS  Type Pers Gend Numb Case OwnN OwnG Cltc Mod  WhT
**** **** **** **** **** **** **** **** ---- ---- ----
```

P	ATT	VAL	C	EN	RO	SL	CS	BG	ET	HU	HR
P	ATT	VAL	C	x	x	-	-	-	-	-	-
1	Type	demonstrative	d	x	x						
		indefinite	i	x	x						
		possessive	s	x	x						
		interrogative	q								
		relative	r								
		exclamative	e								
		article	a								
		general	g	x							
		int_rel	w		x						
		negative	z		x						
		emphatic	h		x						
2	Person	first	1	x	x						
		second	2	x	x						
		third	3	x	x						
3	Gender	masculine	m		x						
		feminine	f		x						
		neuter	n		x						
4	Number	singular	s	x	x						
		plural	p	x	x						
5	Case	direct	r		x						
		oblique	o		x						
6	Owner_Number	singular	s	x	x						
		plural	p	x	x						
7	Owner_Gender	masculine	m	x							
		feminine	f	x							
		neuter	n	x							
8	Clitic	no	n		x						
		yes	y		x						
9	Modific_Type	prenomin	e		x						
		postnomin	o		x						
10	Wh_Type	relative	r	x							
		question	q	x							
				EN	RO	SL	CS	BG	ET	HU	HR

3.6 Article (T)

6 Positions

```
**** **** **** **** **** ----
PoS  Type Gend Numb Case Cltc
**** **** **** **** **** ----
```

P	ATT	VAL	C	EN	RO	SL	CS	BG	ET	HU	HR
P	ATT	VAL	C		x	-	-	-	-	x	-
1	Type	definite	f		x					x	
		indefinite	i		x					x	
		possessive	s		x						
		demonstrative	d		x						
2	Gender	masculine	m		x						
		feminine	f		x						
		neuter	n		x						
3	Number	singular	s		x						
		plural	p		x						
4	Case	direct	r		x						
		oblique	o		x						
5	Clitic	no	n		x						
		yes	y		x						
				EN	RO	SL	CS	BG	ET	HU	HR

3.7 Adverb (R)

7 Positions

```
**** **** **** ---- ---- ---- ----
PoS  Type Degr Cltc Numb Pers WhT
**** **** **** ---- ---- ---- ----
```

P	ATT	VAL	C	EN	RO	SL	CS	BG	ET	HU	HR
P	ATT	VAL	C	x	x	x	x	x	x	x	x
1	Type	general	g		x	x	x	x		x	x
		particle	p		x					x	
		causal	o							x	
		negative	z		x						
		adjectival	a					x			
		verbal	v							x	
		modifier	m	x	x					x	
		specifier	s	x							
		int_rel	w		x						
		portmanteau	c		x						
		interrogative	q							x	
2	Degree	positive	p	x	x	x	x				x
		comparative	c	x	x	x	x				x
		superlative	s	x	x	x	x				x
		elative	e			x					
********************************											
3	Clitic	no	n		x					x	
		yes	y		x					x	
4	Number	singular	s							x	
		plural	p							x	
5	Person	first	1							x	
		second	2							x	
		third	3							x	
6	Wh_Type	relative	r	x							
		question	q	x							
				EN	RO	SL	CS	BG	ET	HU	HR

3.8 Adposition (S)

5 Positions

```
**** **** **** ---- ----
PoS  Type Form Case Cltc
**** **** **** ---- ----
```

P	ATT	VAL	C	EN	RO	SL	CS	BG	ET	HU	HR
P	ATT	VAL	C	x	x	x	x	x	x	x	x
1	Type	preposition	p	x	x	x	x	x	x		x
		postposition	t	x					x	x	
2	Formation	simple	s		x	x	x				x
		compound	c		x	x	x				x
********************************											
3	Case	nominative	n								
	(req.by prep.)	genitive	g		x	x	x				x
		dative	d		x	x	x				x
		accusative	a		x	x	x				x
		locative	l			x	x				x
		instrumental	i			x	x				x
4	Clitic	no	n		x						
		yes	y		x						
				EN	RO	SL	CS	BG	ET	HU	HR

3.9 Conjunction (C)

8 Positions

```
**** **** ---- ---- ---- ---- ---- ----
PoS  Type Form CTyp SubT Cltc Numb Pers
**** **** ---- ---- ---- ---- ---- ----
```

P ATT	VAL	C	EN	RO	SL	CS	BG	ET	HU	HR
			x	x	x	x	x	x	x	x
1 Type	coordinating	c	x	x	x	x	x	x	x	x
	subordinating	s	x	x	x	x	x	x	x	x
	portmanteau	r		x						
********************************										
2 Formation	simple	s		x	x		x		x	x
	compound	c		x	x		x		x	x
3 Coord_Type	simple	s		x						
	repetit	r		x						
	correlat	c		x						
	sentence	p							x	
	words	w							x	
	initial	i	x							
	non_initial	n	x							
4 Sub_Type	negative	z		x						
	positive	p		x						
5 Clitic	no	n		x						
	yes	y		x						
6 Number	singular	s				x				
	plural	p				x				
7 Person	first	1				x				
	second	2				x				
	third	3				x				
			EN	RO	SL	CS	BG	ET	HU	HR

3.10 Numeral (M)

13 Positions

```
**** **** **** **** **** ---- ---- ---- ---- ---- ---- ---- ----
PoS  Type Gend Numb Case Frm  Def  Cltc Clas Anim OwnN OwnP OwdN
**** **** **** **** **** ---- ---- ---- ---- ---- ---- ---- ----
```

P ATT	VAL	C	EN	RO	SL	CS	BG	ET	HU	HR
			x	x	x	x	x	x	x	x
1 Type	cardinal	c	x	x	x	x	x	x	x	x
	ordinal	o	x	x	x	x	x	x	x	x
	fractal	f		x					x	
	multiple	m		x	x	x				x
	collect	l		x					x	
	special	s			x	x				x
2 Gender	masculine	m		x	x	x	x			x
	feminine	f		x	x	x	x			x
	neuter	n		x	x	x	x			x
3 Number	singular	s		x	x	x	x	x	x	x
	plural	p		x	x	x	x	x	x	x
	dual	d			x	x				
4 Case	nominative	n			x	x		x	x	x
	genitive	g			x	x		x	x	x
	dative	d			x	x			x	x
	accusative	a			x	x			x	x
	vocative	v								x
	locative	l			x	x				x
	instrumental	i			x	x			x	x
	direct	r		x						
	oblique	o		x						
	partitive	1						x		
	illative	x						x	x	
	inessive	2						x	x	
	elative	e						x	x	
	allative	t						x	x	
	adessive	3						x	x	
	ablative	b						x	x	
	translative	4						x		
	terminative	9						x	x	
	essive	w						x	x	
	abessive	5						x		
	komitative	k						x		
	aditive	7						x		
	temporalis	m							x	
	causalis	c							x	
	sublative	s							x	
	delative	h							x	

```
                 sociative      q                          x
                 factive        y                          x
                 superessive    p                          x
                 distributive   u                          x
                 essive_formal  f                          x
                 multiplicative 6                          x
*********************************
5 Form           digit          d      x   x   x   x   x   x   x
                 roman          r      x   x   x   x   x   x   x
                 letter         l      x   x   x   x   x   x   x
                 both           b      x
                 m_form         m                  x
                 approx         a                  x
- -------------- -------------- -
6 Definiteness   no             n      x   x       x
                 yes            y      x   x       x
                 short_art      s                  x
                 full_art       f                  x
- -------------- -------------- -
7 Clitic         no             n      x
                 yes            y      x
- -------------- -------------- -
8 Class          definite1      1              x
                 definite2      2              x
                 definite34     3              x
                 definite       f              x
                 demonstrative  d              x
                 indefinite     i              x
                 interrogative  q              x
                 relative       r              x
- -------------- -------------- -
9 Animate        no             n          x   x               x
                 yes            y          x   x               x
- -------------- -------------- -
10Owner_Number   singular       s                          x
                 plural         p                          x
- -------------- -------------- -
11Owner_Person   first          1                          x
                 second         2                          x
                 third          3                          x
- -------------- -------------- -
12Owned_Number   singular       s                          x
                 plural         p                          x
=================================  EN  RO  SL  CS  BG  ET  HU  HR
```


3.11 Interjection (I)

3 Positions

```
**** ---- ----
PoS  Type Form
**** ---- ----
```

```
= ============== ============== =  EN  RO  SL  CS  BG  ET  HU  HR
P ATT            VAL            C  x   x   x   x   x   x   x   x
= ============== ============== =
1 Type           mood           m                          x
                 other          o                          x
- -------------- -------------- -
2 Formation      simple         s                  x               x
                 compound       c                  x               x
=================================  EN  RO  SL  CS  BG  ET  HU  HR
```

3.12 Residual (X)

1 Position

```
****
PoS
****
```

```
= ============== ============== =  EN  RO  SL  CS  BG  ET  HU  HR
P ATT            VAL            C  x   x   x   x   x   x   x   x
= ============== ============== =
=================================  EN  RO  SL  CS  BG  ET  HU  HR
```

3.13 Abbreviation (Y)

6 Positions

```
**** ---- ---- ---- ---- ----
PoS  SynT Gend Numb Case Def
**** ---- ---- ---- ---- ----
```

P	ATT	VAL	C	EN	RO	SL	CS	BG	ET	HU	HR
P	ATT	VAL	C	x	x	x	x	x	x	x	x
1	Syntactic_Type	nominal	n		x				x		x
		verbal	v		x				x		
		adjectival	a		x				x		
		adverbial	r		x				x		x
		pronominal	p		x						
2	Gender	masculine	m		x						x
		feminine	f		x						x
		neuter	n		x						x
3	Number	singular	s		x				x		x
		plural	p		x				x		x
4	Case	nominative	n						x		x
		genitive	g						x		x
		dative	d								x
		accusative	a								x
		locative	l								x
		instrumental	i								x
		direct	r		x						
		oblique	o		x						
		vocative	v		x						
		partitive	1						x		
		illative	x						x		
		inessive	2						x		
		elative	e						x		
		allative	t						x		
		adessive	3						x		
		ablative	b						x		
		translative	4						x		
		terminative	9						x		
		essive	w						x		
		abessive	5						x		
		komitative	k						x		
		aditive	7						x		
5	Definiteness	yes	y		x						
		no	n		x						
				EN	RO	SL	CS	BG	ET	HU	HR

3.14 Particle (Q)

5 Positions

```
**** ---- ---- ----
PoS  Type Form Cltc
**** ---- ---- ----
```

P	ATT	VAL	C	EN	RO	SL	CS	BG	ET	HU	HR
P	ATT	VAL	C		x	x	x	x	-	-	x
1	Type	negative	z		x			x			x
		infinitive	n		x						
		subjunctive	s		x						
		aspect	a		x						
		future	f		x						
		general	g					x			
		comparative	c					x			
		verbal	v					x			
		interrogative	q					x			x
		modal	o					x			x
		affirmative	r								x
2	Formation	simple	s					x			
		compound	c					x			
3	Clitic	no	n		x						
		yes	y		x						
				EN	RO	SL	CS	BG	ET	HU	HR

3.15 List of values with codes

The values presented within the tables are, in the following, listed in alphabetical order; the first column gives the name of the value, the second column its code and the third lists attributes for which the value is appropriate.

1s2s	2	Definiteness
abessive	5	Case
ablative	b	Case
accusative	a	Case
active	a	Voice
adessive	3	Case
aditive	7	Case
adjectival	a	Syntactic_Type, Type
adverbial	r	Syntactic_Type
allative	t	Case
aorist	a	Tense
approx	a	Form
article	a	Type
aspect	a	Type
attributive	a	Referent_Type
auxiliary	a	Type
base	b	VForm
both	b	Form
bound	b	Clitic
cardinal	c	Type
causal	o	Type
causalis	c	Case
collect	l	Type
common	c	Type
comparative	c	Degree, Type
compound	c	Formation
conditional	c	VForm
coordinating	c	Type
copula	c	Type
correlat	c	Coord_Type
count	t	Number
dative	d	Case
definite	f	Class, Type
definite1	1	Class
definite2	2	Class
definite34	3	Class
delative	h	Case
demonstrative	d	Class, Type
determinal	m	Type
digit	d	Form
direct	r	Case
distributive	u	Case
dual	d	Number, Owner_Number
elative	e	Case, Degree
emphatic	h	Type
essive	w	Case
essive_formal	f	Case
exclamative	e	Type
ex_there	t	Type/P
factive	y	Case
feminine	f	Gender, Owner_Gender
first	1	Owner_Person, Person
fractal	f	Type
full_art	f	Definiteness
future	f	Tense, Type
general	g	Type
genitive	g	Case
gerund	g	VForm

illative	x	Case
imperative	m	VForm
imperfect	i	Tense
indefinite	i	Class, Type
indicative	i	VForm
inessive	2	Case
infinitive	n	Type, VForm
initial	i	Coord_Type
instrumental	i	Case
int_rel	w	Type
interrogative	q	Class, Type
komitative	k	Case
letter	l	Form
locative	l	Case
m_form	m	Form
main	m	Type
masculine	m	Gender, Owner_Gender
modal	o	Type
modifier	m	Type
mood	m	Type
multiple	m	Type
multiplicative	6	Case
negative	z	Sub_Type, Type
neuter	n	Gender, Owner_Gender
no	n	Animate, Clitic, Clitic_s, Definiteness, Negative
nominal	n	Formation, Syntactic_Type
nominative	n	Case
non_initial	n	Coord_Type
oblique	o	Case
ordinal	o	Type
other	o	Type
participle	p	VForm
particle	p	Type
partitive	1	Case
passive	p	Voice
past	s	Tense
perfective	e	Aspect
personal	p	Referent_Type, Type
pluperfect	l	Tense
plural	p	Number, Owned_Number, Owner_Number
portmanteau	c	Type (Adverb)
portmanteau	r	Type (Conjunction)
positive	p	Degree, Sub_Type
possessive	s	Referent_Type, Type
postnomin	o	Modific_Type
postposition	t	Type
prenomin	e	Modific_Type
preposition	p	Type
present	p	Tense
progressive	p	Aspect
pronominal	p	Syntactic_Type
proper	p	Type
qualificative	f	Type
quantitative	q	Referent_Type
question	q	Wh_Type
quotative	q	VForm
reciprocal	y	Type
reflexive	x	Type
relative	r	Class, Type, Wh_Type
repetit	r	Coord_Type
roman	r	Form
second	2	Owner_Person, Person
sentence	p	Coord_Type
short_art	s	Definiteness
simple	s	Coord_Type, Formation
singular	s	Number, Owned_Number, Owner_Number

sociative	q	Case
special	s	Type/M
specifier	s	Type/R
strong	s	Pronoun_Form
subjunctive	s	Type, VForm
sublative	s	Case
subordinating	s	Type
superessive	p	Case
superlative	s	Degree
supine	u	VForm
temporalis	m	Case
terminative	9	Case
third	3	Owner_Person, Person
transgressive	t	VForm
translative	4	Case
verbal	v	Type
vocative	v	Case
weak	w	Pronoun_Form
words	w	Coord_Type
yes	y	Animate, Clitic, Clitic_s, Definiteness, Negative

3.16 List of attributes

In this section, all the attributes presented in the tables are listed in alphabetical order. For some attributes which are not self-explanatory, a brief description of their semantics is provided.

Attribute	Relevant to Category
Animate	Adj Noun Num Pron Verb
Aspect	Verb
Case	Abbr Adj Adpos Art Det Noun Num Pron Verb
Class	Num
Clitic	Adj Adpos Adv Art Conj Det Noun Num Part Pron Verb
Clitic_s	Pron
Coord_Type	Conj
Definiteness	Abbr Adj Noun Num Pron Verb
Degree	Adj Adv
Form	Num
Formation	Adj Adpos Conj Interj Part
Gender	Abbr Adj Art Det Noun Num Pron Verb
Modific_Type	Det
Negative	Verb
Number	Abbr Adj Adv Art Conj Det Noun Num Pron Verb
Owned_Number	Adj Noun Num Pron
Owner_Gender	Det Pron
Owner_Number	Adj Det Noun Num Pron
Owner_Person	Adj Noun Num Pron
Person	Adv Conj Det Pron Verb
Pronoun_Form	Pron
Referent_Type	Pron
Sub_Type	Conj
Syntactic_Type	Abbr Pron
Tense	Verb
Type	Adj Adpos Adv Art Conj Det Interj Noun Num Part Pron Verb
VForm	Verb
Voice	Verb
Wh_Form	Adv Det Pron

Class: distinguishes subtypes of Numerals in Czech which have a distinct syntactic distributions: e.g. subclasses for 1, 2, 3&4, etc. are distinguished.

Clitic_s: the 'yes' value of the Clitic_s attribute denotes Czech pronouns having the clitic morpheme 's' appended as a suffix.

Definiteness: corresponds to the definite and indefinite article in English, which is expressed in the Slavic languages by suffixes. For Bulgarian singular masculine there are two forms: full article and short article (full is used when a sing.masc. form is the syntactic subject of the clause, otherwise short article is used). The distinction full vs. short is not made for feminine, neuter and plural forms. Definiteness is also used in Romanian.

Form: used to distinguish different forms of numerals (Roman, digit, 'letter') and in Bulgarian also for the semantic distinction between numerals that refer to male persons (but not children) or groups of male+female.

Formation: refers to the graphical components: simple, i.e. consisting of one word; compound, i.e. consisting of more than one word.

Modific_Type: refers to the prenominal or postnominal positions of Determiners which distinguish different forms in Romanian.

Negative: the value 'yes' encodes negative verbal word-forms in Czech, Slovene and in Estonian.

Owned_Number: in the Hungarian system, different word-forms are distinguished for nominals on the basis of so called 'anaphoric possessive' number, i.e. the number of the thing(s) possessed by the nominal in question.

Owner_Gender: used to encode the Gender of the possessor in Pronouns and (in Romanian) Determiners.

Owner_Number: used to specify the possessor number in Pronouns, as well as (in Romanian) in Determiners, and (in Hungarian) in Adjectives and Nouns.

Owner_Person: used to specify the possessor person in in Hungarian in Adjectives and Nouns.

Pronoun_Form: used to encode weak and strong pronouns in Romanian.

Referent_Type: used to distinguish reflexive personal from reflexive possessive pronouns in the Slavic languages. In Bulgarian, it also describes a subdivision on the basis of semantic features which have effect on the morpho-syntactic paradigm, e.g. quantitative: the pronoun refers to quantity, etc.

Sub_Type: used in Romanian to distinguish negative from positive Conjunctions.

Syntactic_Type: used to distinguish the nominal and adjectival function of Pronouns in Slovene and Czech. Also used in Abbreviations to signal the Part of Speech of the abbreviation; currently used only by Romanian and Estonian.

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Part II

Language Specific Applications

Chapter 4

Application to English

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The specification is based on the MULTEXT application to English, detailed in MULTEXT Milestone B Deliverable D1.6.1B, March 1995.

4.1 Noun (N)

1.1. Lexicon

P	ATT	VAL	C
1	Type	common	c
		proper	p
2	Gender	masculine	m
		feminine	f
		neuter	n
3	Number	singular	s
		plural	p
4	Case		-
5	Definiteness		-
6	Clitic		-
7	Animate		-
8	Owner_Number		-
9	Owner_Person		-

```
10Owned_Number                 -
================================
```

1.2 Combinations

```
Lexicon   Definition
------------------------------------
Nc        Noun common
Nc-p      Noun common plural
Nc-s      Noun common singular
Ncf       Noun common feminine
Ncfp      Noun common feminine plural
Ncfs      Noun common feminine singular
Ncm       Noun common masculine
Ncmp      Noun common masculine plural
Ncms      Noun common masculine singular
Ncn       Noun common neuter
Ncnp      Noun common neuter plural
Ncns      Noun common neuter singular
Np        Noun proper
Np-p      Noun proper plural
Np-s      Noun proper singular
Npfs      Noun proper feminine singular
Npms      Noun proper masculine singular
Npnp      Noun proper neuter plural
Npns      Noun proper neuter singular
```

4.2 Verb (V)

2.1 Lexicon

```
= ============== ============== =
P ATT            VAL            C
= ============== ============== =
1 Type           main           m
                 auxiliary      a
                 modal          o
           l.s.  base           b
- -------------- -------------- -
2 VForm          indicative     i
                 conditional    c
                 infinitive     n
                 participle     p
- -------------- -------------- -
3 Tense          present        p
                 past           s
- -------------- -------------- -
4 Person         first          1
                 second         2
```



```
                 third          3
- -------------- -------------- -
5 Number         singular       s
                 plural         p
- -------------- -------------- -
6 Gender                        -
********************************
7 Voice                         -
- -------------- -------------- -
8 Negative                      -
- -------------- -------------- -
9 Definiteness                  -
- -------------- -------------- -
10Clitic                        -
- -------------- -------------- -
11Case                          -
- -------------- -------------- -
12Animate                       -
- -------------- -------------- -
13Clitic_s                      -
================================
```

Notes:
These tags do not attempt to represent distinctions found in the various compound verb-forms. These are composed of a sequence of auxiliary and non-finite verb as follows:

```
        future             will/shall + base
        conditional        would/should + base
        passive            be + past participle
        perfect            have + past participle
        past perfect       have-past + past participle
        present continuous be + present participle
        infinitive         to + base
```

So there is no "aspect" attribute or "future" value, for example.

Examples:

```
    go     Vmn, Vmip-p, Vmip1s, Vmip2s
    goes   Vmip3s
    going  Vmpp
    gone   Vmps
    went   Vmis
    have   Van, Vmn, Vaip-p, Vaip1s, Vaip2s, Vmip-p, Vmip1s, Vmip2s
    has    Vaip3s, Vmip3s
    had    Vais, Vmis, Vmps
    having Vapp, Vmpp
    be     Van, Vmnp
    am     Vaip1s, Vmip1s
    are    Vaip-p, Vaip2s, Vmip-p, Vmip2s
    is     Vaip3s, Vmip3s
    was    Vais1s, Vais3s, Vmis1s, Vmis3s
    were   Vacs, Vais-p, Vais2s, Vmis-p, Vmis2s,
```

been	Vais, Vaps
being	Vapp
will	Vmn, Vmip-p, Vmip1s, Vmip2s, Voip
would	Voip

2.2 Combinations

Lexicon	Definition
Vacs	Verb auxiliary conditional past
Vaip-p	Verb auxiliary indicative present plural
Vaip1s	Verb auxiliary indicative present first singular
Vaip2s	Verb auxiliary indicative present second singular
Vaip3s	Verb auxiliary indicative present third singular
Vais	Verb auxiliary indicative past
Vais-p	Verb auxiliary indicative past plural
Vais1s	Verb auxiliary indicative past first singular
Vais2s	Verb auxiliary indicative past second singular
Vais3s	Verb auxiliary indicative past third singular
Van	Verb auxiliary infinitive
Vapp	Verb auxiliary participle present
Vaps	Verb auxiliary participle past
Vmcs	Verb main conditional past
Vmip	Verb main indicative present
Vmip-p	Verb main indicative present plural
Vmip1s	Verb main indicative present first singular
Vmip2s	Verb main indicative present second singular
Vmip3s	Verb main indicative present third singular
Vmis	Verb main indicative past
Vmis-p	Verb main indicative past plural
Vmis1s	Verb main indicative past first singular
Vmis2s	Verb main indicative past second singular
Vmis3s	Verb main indicative past third singular
Vmn	Verb main infinitive
Vmnp	Verb main infinitive present
Vmpp	Verb main participle present
Vmps	Verb main participle past
Voip	Verb modal indicative present

4.3 Adjective (A)

3.1 Lexicon

```
= ============== ============== =
P ATT            VAL            C
= ============== ============== =
1 Type           qualificative  f
- -------------- -------------- -
2 Degree         positive       p
```



```
                 comparative    c
                 superlative    s
- -------------- -------------- -
3 Gender                        -
- -------------- -------------- -
4 Number                        -
- -------------- -------------- -
5 Case                          -
* ***************************** *
6 Definiteness                  -
- -------------- -------------- -
7 Clitic                        -
- -------------- -------------- -
8 Animate                       -
- -------------- -------------- -
9 Formation                     -
- -------------- -------------- -
10Owner_Number                  -
- -------------- -------------- -
11Owner_Person                  -
---------------- -------------- -
12Owned_Number                  -
=================================
```

Notes:

Gender, number and case irrelevant for English.

Attributive/predicative distinction reflects positional constraints - some adjectives ('mere', 'utter', etc.) only appear in prenominal position, while others ('awake', 'devoid', etc.) only appear in predicative position. Most can appear in either.

Since many English comparatives & superlatives are formed with more/most, "positive" cannot be interpreted as "neither comparative nor superlative". See "Adverbs".

Examples:

big	Af, Afp
bigger	Afc
biggest	Afs
more peculiar	Rsc + Afp
most remarkable	Rss + Afp
awake	Afp
mere	Afp

3.2 Combinations

Lexicon	Definition
Af	Adjective qualificative

Afc	Adjective qualificative comparative
Afp	Adjective qualificative positive
Afs	Adjective qualificative superlative

4.4 Pronoun (P)

4.1 Lexicon

P ATT		VAL	C
1 Type		personal	p
		possessive	s
		interrogative	q
		relative	r
		reflexive	x
		general	g
	l.s.	ex_there	t
2 Person		first	1
		second	2
		third	3
3 Gender		masculine	m
		feminine	f
		neuter	n
4 Number		singular	s
		plural	p
5 Case		nominative	n
		accusative	a
6 Owner_Number		singular	s
		plural	p
7 Owner_Gender		masculine	m
		feminine	f
********************************			
8 Clitic			-
9 Referent_Type			-
10Syntactic_Type			-
11Definiteness			-
12Animate			-
13Clitic_s			-

P ATT	VAL	C
14Pronoun_Form		-
15Owner_Person		-
16Owned_Number		-
17Wh_Type	relative	r
	question	q

Notes:

"General" pronouns are those which are not personal, possessive, demonstrative or reflexive. The choice of these four categories is based on distributional facts, though at a rather high level of abstraction. They enter into anaphoric dependencies which are signalled morphosyntactically and are therefore (in principle) more amenable to automatic detection. Most general pronouns do not, although they too sometimes encode number information.

"WH" attribute added to allow for combination of possessive and WH in "whose".

Examples:

Pg3n	some, all, ...
Pg3ns	each, something, nothing, everything, -body, ...
Pg3np	both, ...
Pg3ns	this, that
Pg3np	these, those
Ps3---s	mine
Ps3	yours
Ps3---sm	his
Ps3---sf	hers
?	its
Ps3---p	ours, theirs
Ps3--------------q Ps3--------------r	whose
Pp1-sn	I
Pp2	you
Pp3msn	he
Pp3fsn	she
Pp3ns	it
Pp1-pn	we
Pp--pn	they
Pp--sn	me
Pp3msa	him
Pp3fsa	her
Pp1-pa	us
Pp3-pa	them
Px1-s	myself
Px2-s	yourself
Px3ms	himself

```
    Px3fs         herself
    Px3ns         itself
    Px1-p         ourselves
    Px2-p         yourselves
    Px3-p         themselves
    Pg3--------------q Pg3--------------r  which, whatever
    Pg3--------------q what
```

4.2 Combinations

```
Lexicon             Definition
----------------------------------------------------------------------------
Pg3--------------q  Pronoun general third question
Pg3--------------r  Pronoun general third relative
Pg3-p               Pronoun general third plural
Pg3-s               Pronoun general third singular
Pg3fs               Pronoun general third feminine singular
Pg3ms               Pronoun general third masculine singular
Pg3n                Pronoun general third neuter
Pg3np               Pronoun general third neuter plural
Pg3ns               Pronoun general third neuter singular
Pp---------------q  Pronoun personal question
Pp---------------r  Pronoun personal relative
Pp---a-----------q  Pronoun personal accusative question
Pp---a-----------r  Pronoun personal accusative relative
Pp--pn              Pronoun personal plural nominative
Pp--sn              Pronoun personal singular nominative
Pp1-pa              Pronoun personal first plural accusative
Pp1-pn              Pronoun personal first plural nominative
Pp1-sn              Pronoun personal first singular nominative
Pp2                 Pronoun personal second
Pp2-p               Pronoun personal second plural
Pp3-pa              Pronoun personal third plural accusative
Pp3fs               Pronoun personal third feminine singular
Pp3fsa              Pronoun personal third feminine singular accusative
Pp3fsn              Pronoun personal third feminine singular nominative
Pp3ms               Pronoun personal third masculine singular
Pp3msa              Pronoun personal third masculine singular accusative
Pp3msn              Pronoun personal third masculine singular nominative
Pp3ns               Pronoun personal third neuter singular
Ps3                 Pronoun possessive third
Ps3--------------q  Pronoun possessive third question
Ps3--------------r  Pronoun possessive third relative
Ps3---p             Pronoun possessive third plural
Ps3---s             Pronoun possessive third singular
Ps3---sf            Pronoun possessive third singular feminine
Ps3---sm            Pronoun possessive third singular masculine
Pt3                 Pronoun ex_there third
Px1-p               Pronoun reflexive first plural
Px2-p               Pronoun reflexive second plural
Px2-s               Pronoun reflexive second singular
Px3-p               Pronoun reflexive third plural
```



```
Px3-s               Pronoun reflexive third singular
Px3fs               Pronoun reflexive third feminine singular
Px3ms               Pronoun reflexive third masculine singular
Px3ns               Pronoun reflexive third neuter singular
```

4.5 Determiner (D)

5.1 Lexicon

```
= ============== ============== =
P ATT            VAL            C
= ============== ============== =
1 Type           demonstrative  d
                 indefinite     i
                 possessive     s
           l.s.  general        g
- -------------- -------------- -
2 Person         first          1
                 second         2
                 third          3
- -------------- -------------- -
3 Gender                        -
- -------------- -------------- -
4 Number         singular       s
                 plural         p
- -------------- -------------- -
5 Case                          -
- -------------- -------------- -
6 Owner_Number   singular       s
                 plural         p
- -------------- -------------- -
7 Owner_Gender   masculine      m
                 feminine       f
                 neuter         n
*********************************
8 Clitic                        -
- -------------- -------------- -
9 Modific_Type                  -
- -------------- -------------- -
10Wh_Type        relative       r
                 question       q
=================================
```

Notes:

Definite and indefinite articles represented as values of "Type".

Examples:

```
    Dd            the
```

```
    Di            a/an
    Dg--s         this, that
    Dg--p         these, those
    Ds1---s       my
    Ds2           your
    Ds3---sm      his
    Ds3---sf      her
    Ds3---sn      its
    Ds1---p       our
    Ds3---p       their
    Ds--------q Ds--------r   whose
    Dg--------q Dg--------r   which
    Dg--------q               what
    Dg            each, some, ...
    Dg--p         all, both, certain, many, ...
```

5.2 Combinations

```
Lexicon       Definition
-----------------------------------------------
Dd            Determiner demonstrative
Dg            Determiner general
Dg--------q   Determiner general question
Dg--------r   Determiner general relative
Dg--p         Determiner general plural
Dg--s         Determiner general singular
Di            Determiner indefinite
Ds--------q   Determiner possessive question
Ds--------r   Determiner possessive relative
Ds1---p       Determiner possessive first plural
Ds1---s       Determiner possessive first singular
Ds2           Determiner possessive second
Ds3---p       Determiner possessive third plural
Ds3---sf      Determiner possessive third singular feminine
Ds3---sm      Determiner possessive third singular masculine
Ds3---sn      Determiner possessive third singular neuter
```

4.6 Article (T)

Not applicable.

4.7 Adverb (R)

7.1 Lexicon

```
= ============== ============== =
P ATT            VAL            C
```



```
= ============== ============== =
1 Type
                 modifier       m
           l.s.  specifier      s
- -------------- -------------- -
2 Degree         positive       p
                 comparative    c
                 superlative    s
*********************************
3 Clitic                        -
- -------------- -------------- -
4 Number                        -
- -------------- -------------- -
5 Person                        -
- -------------- -------------- -
6 Wh_Type        relative       r
                 question       q
=================================
```

Notes:

No distinction has been made between different types of "modifier" adverbs ("sentence-modifying", "VP-modifying", etc.), since their distributions overlap considerably.

Examples:

```
    Rmp Rsp   so, too, very, as
    R-p---q   how
    Rmp Rsc   more
    Rmp Rss   most
    Rmp       quickly, soon, here, then, now
    Rmc       better, worse
    Rms       best, worst
    Rmp---q Rmp---r where, when,
    R-p---q   how
    Rmp---q   why
```

7.2 Combinations

```
Lexicon   Definition
------------------------------------
R-p---q   Adverb positive question
Rmc       Adverb modifier comparative
Rmp       Adverb modifier positive
Rmp---q   Adverb modifier positive question
Rmp---r   Adverb modifier positive relative
Rms       Adverb modifier superlative
Rsc       Adverb specifier comparative
Rsp       Adverb specifier positive
Rss       Adverb specifier superlative
```

4.8 Adposition (S)

8.1 Lexicon

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
1 Type          preposition   p
                postposition  t
- ------------- ------------- -
2 Formation                   -
*******************************
3 Case                        -
- ------------- ------------- -
4 Clitic                      -
===============================
```

Notes:

Postpositions are rare in English.

"possessive" 's and ' might be considered postpositions, especially if the alternative is to assign them to the unique membership class (where by definition they would be unrelated).

```
Examples:
    Sp      in, near, behind,...
    St      notwithstanding, ago
```

8.2 Combinations

Lexicon	Definition
S	Adposition
Sp	Adposition preposition
St	Adposition postposition

4.9 Conjunction (C)

9.1 Lexicon

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
1 Type          coordinating  c
                subordinating s
*******************************
2 Formation                   -
```



```
- ------------- ------------- -
3 Coord_Type l.s
            l.s. initial      i
            l.s. non_initial  n
- ------------- ------------- -
4 Sub_Type                    -
- ------------- ------------- -
5 Clitic                      -
- ------------- ------------- -
6 Number                      -
- ------------- ------------- -
7 Person                      -
===============================
```

Notes:

Subordinating conjunctions are often identical to prepositions (before, after, since, ...).

```
Examples:
    Cc-n  and, or, but
    Cc-i  either, neither, both
    Cs    for, that, because, ...
```

9.2 Combinations

Lexicon	Definition
Cc	Conjunction coordinating
Cc-i	Conjunction coordinating initial
Cc-n	Conjunction coordinating non_initial
Cs	Conjunction subordinating

4.10 Numeral (M)

10.1 Lexicon

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
1 Type          cardinal      c
                ordinal       o
- ------------- ------------- -
2 Gender                      -
- ------------- ------------- -
3 Number                      -
- ------------- ------------- -
4 Case                        -
```

```
********************************
5 Form                         -
- ------------- ------------- -
6 Definiteness                 -
- ------------- ------------- -
7 Clitic                       -
- ------------- ------------- -
8 Class                        -
- ------------- ------------- -
9 Animate                      -
- ------------- ------------- -
10Owner_Number                 -
- ------------- ------------- -
11Owner_Person                 -
- ------------- ------------- -
12Owned_Number                 -
================================
```

Notes:

These have not been subsumed under adjectives, pronouns, determiners, etc. because the internal structure of complex numerals is idiosyncratic.

```
Examples:
    Mc    six
    Mo    sixth
```

10.2 Combinations

```
Lexicon   Definition
------------------------------------
Mc        Numeral cardinal
Mo        Numeral ordinal
```

4.11 Interjection (I)

11.1 Lexicon

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
1 Type                        -
- ------------- ------------- -
2 Formation                   -
================================
```


11.2 Combinations

```
Lexicon   Definition
------------------------------------
I         Interjection
```

4.12 Residual (X)

Not applicable.

4.13 Abbreviation (Y)

13.1 Lexicon

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
1 Syntactic_Type              -
- -----------------------------
2 Gender                      -
- ------------- ------------- -
3 Number                      -
- ------------- ------------- -
4 Case                        -
- ------------- ------------- -
5 Definiteness                -
================================
```

10.2 Combinations

```
Lexicon   Definition
------------------------------------
Y         Abbreviation
```

4.14 Particle (Q)

Not applicable.

Chapter 5

Application to Romanian

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5.1 Noun (N)

In Romanian the following attribute-value pairs are applicable to Nouns:

1.1 Type

Attribute	value	Ro. example
Type	common (c)	carte
	proper (p)	Ion

1.2 Gender

Attribute	value	Ro. example
Gender	masculine (m)	băiatul
	feminine (f)	casa
	neuter (n)	fir (m.sg.),fire (f.pl.)

In Romanian the declension of a neuter noun always follows in singular a masculine paradigm and in plural a feminine one. Specific implementations could take advantage of this rule and by organizing the paradigmatic space in partial paradigms (masc-sing, masc-pl, fem-sing, fem-pl) to get rid of neuter value for the gender attribute.

1.3 Number

Attribute	value	Ro. example
Number	singular (s)	fată
	plural (p)	fete

1.4 Case

There are five functional cases in Romanian (nominative, genitive, dative, accusative and vocative) but they are expressed by at most three syncretic forms for each number: 1. nominative-accusative; 2. genitive-dative; 3. vocative. The ambiguity of a syncretic case form may be solved at the syntactic level. Taking into account this syncretism we considered the following attribute-value combinations.

Attribute	value	Ro. example
Case	direct(d)	omul
	oblique (o)	omului
	vocative (v)	omule

At the word level, the distinction between the three syncretic forms is possible only for the definite nouns. Masculine indefinite nouns are not differentiated by case (except, sometimes for vocative. The feminine indefinite nouns have different forms in singular for nominative-accusative, genitive-dative and vocative, but the genitive-dative singular forms are also indistinguishable from the plural forms:

fată	- nominative-accusative, vocative singular, indefinite
fato	- vocative singular, indefinite
fete	- genitive-dative singular, nominative-accusative, genitive-dative, vocative plural, indefinite
băiat	- nominative-accusative, genitive-dative, vocative singular, indefinite
băiete	- vocative singular, indefinite
băieţi	- nominative-accusative, genitive-dative, vocative, plural, indefinite

1.5 Definiteness

In Romanian, nouns can be marked for definiteness with the enclitic definite article.

Attribute	value	Ro. example
Definiteness	yes (y)	omul
	no (n)	om

1.6 Clitic

See discussion in 2.10

Attribute	value	Ro. example
Clitic	no (n)	sora
	yes (y)	soru-mea

Combinations

Here, and in all the sections to follow, the trailing hyphens are deleted.

Tag	Example
Ncmsrn	frate
Ncmson	frate
Ncmsvn	frate
Ncmsry	fratele
Ncmsoy	fratelui
Ncmprn	fraţi
Ncmpon	fraţi
Ncmpvn	fraţi
Ncmpry	fraţii
Ncmpoy	fraţilor
Ncmpvy	fraţilor
Ncfsrn	soră
Ncfsvn	soro
Ncfson	surori
Ncfprn	surori
Ncfpon	surori
Ncfpvn	surori
Ncfsoyy	soră(-sii)
Ncfpry	surorile
Ncfpoy	surorilor
Ncfpvy	surorilor
Ncfsryy	soră(-sa)
Ncmsrn	creion
Ncmson	creion
Ncmsryy	creionu-(i)
Ncmsoy	creionului
Ncfprn	creioane
Ncfpon	creioane
Ncfpry	creioanele
Ncfpoy	creioanelor
Npfsr	Ioana
Npfso	Ioanei
Npmsrn	Bucureşti
Npmsry	Bucureştiul

5.2 Verb (V)

The following attribute-value pairs are applicable to verbs in Romanian:

2.1 Type

Attribute	value	Ro. example
Type	main (m)	a vedea
	auxiliary (a)	a avea, a fi, a voi
	modal (o)	a putea, a trebui
	copulative (c)	a fi, a deveni

2.2 VForm

Traditionally, Romanian linguistics distinguishes between predicative and non-predicative moods. This distinction may be easily mapped into finite/non-finite dichotomy: indicative, subjunctive and imperative are finite; infinitive, participle and gerund are non-finite (only synthetic (non-compound) moods were mentioned; we use the opposition synthetic-analytic to distinguish between concatenative (synthetic) and compound (analytic) morpho-lexical phenomena).

Attribute	value	Ro. example
VForm	indicative(i)	vine
	subjunctive (s)	vină
	imperative (m)	vino
	infinitive (n)	veni
	participle (p)	venit
	gerund (g)	venind

As only synthetic forms were considered, the values conditional and presumptive for the VForm attribute were left out in Romanian. Another value for VForm which was left out is the Supine. It appears mostly with a preposition, except for a few intransitive verbs when they are subordinated to the impersonal verb a trebui (must). Only the preposition allows for differentiating a supine from a participle-masculine-singular.

2.3 Tense

The synthetic values for the attribute Tense, as listed in the table below, apply to the indicative mood. The value p (present) is used also for subjunctive and infinitive. All the other moods either have no tense or have compound form tenses.

Attribute	value	Ro. example
Tense	present (p)	văd
	imperfect (i)	vedeam
	past (s)	văzui
	pluperfect (l)	văzusem

2.4 Person

Attribute	value	Ro. example
Person	first (1)	văd
	second (2)	vezi
	third (3)	vede

The following features are pertinent to those moods which permit an adjectival use, i.e. participle and gerund. However, the adjectival use of gerund is extremely rare (o mână tremurndă - a shaking hand) and therefore gender and number apply mainly for the participle.

2.5 Number

Attribute	value	Ro. example
Number	singular (s)	bătut
	plural (p)	bătuţi

2.6 Gender

Attribute	value	Ro. example
Gender	masculine(m)	bătut
	feminine(f)	bătută
	neuter(n)	bătut-bătute

2.7, 2.8, 2.9 Voice, Negation, Definiteness

As these feature values are either realized as compound forms or are irrelevant for Romanian they were omitted in our word-level encoding.

2.10 Clitic

The cliticization phenomenon in Romanian is not restricted to verb-pronoun relationship, but may also be observed with the (main) verb and the auxiliary, the noun or adjective with pronoun, with noun or adjective with copula, pronoun with auxiliary, preposition with (indefinite) article, numeral or (indefinite) pronoun, negative adverb with verb, auxiliary or pronoun, and some others (mainly created through the contracted forms of the verb "a fi"-to be). We restrict ourselves to considering only the graphically marked clicitizations. In such cases, the two, three or (sometimes) four constituents of a cliticized word-form are always separated by a hyphen. Omitting the hyphen in such cases is an unacceptable error in written Romanian. The examples below illustrate the specific types of cliticization we will consider:

```
dă-mi-l !                  (you give +to me+it/him = give it/him to me)
lăsatu-ne-ai               (left + us+ you have = you have left us)
sparge-ţi-s-ar lampa       (break + your + s-part-conj + has lamp =
                            I wish your lamp would break)
soră-mii                   (sister + my = to my sister)
faţa-i                     (his/her face | the face is)
roşu-i                     (his/her red | the red is )
m-au                       (me + they have )
```



```
într-o gaură               (in + a hole)
într-o oră                 (in + one hour)
într-unele                 (into + some of)
n-aud                      (not  + I hear = I do not hear)
n-am                       (not + I/we have = I have not )
nu-mi                      (not + to me )
```

The order in which different constituents of a cliticized form appear is governed by precise morphological rules. For instance, the auxiliaries always appear in the last position. The main verbs, except those beginning either with the letter "a" or the letter î and the contracted forms (-s and -i) of the verb "a fi"- to be, always appear in the first position, nouns and adjectives always precede the cliticized pronouns, the negative adverbial particles nu- and n- only appear in the first position, and so on. However, in order to reduce spurious ambiguity in morpho-lexical encoding, we considered the attribute CLITIC as relevant only in those cases where the clicitization phenomenon resulted in graphemic modification of the cliticized term (as it is the epenthetic u in the gerund form shown in the table below).

Attribute	value	Ro. example
Clitic	no (n)	am ridicat
	yes (y)	ridicându-l

Combinations

Tag	Example
Vmii1s	abandonam
Vmii2s	abandonai
Vmii3s	abandona
Vmii1p	abandonam
Vmii2p	abandonaţi
Vmii3p	abandonau
Vmis1s	abandonai
Vmis2s	abandonaşi
Vmis3s	abandonă
Vmis1p	abandonarăm
Vmis2p	abandonarăţi
Vmis3p	abandonă
Vmil1s	abandonasem
Vmil2s	abandonaseşi
Vmil3s	abandonase
Vmil1p	abandonaserăm
Vmil2p	abandonaserăţi
Vmil3p	abandonaseră
Vmip1s	abandonez
Vmsp1s	abandonez
Vmip2s	abandonezi
Vmsp2s	abandonezi
Vmip3s	abandonează

Vmip3p	abandonează
Vmsp3s	abandoneze
Vmsp3p	abandoneze
Vmsp1p	abandonăm
Vmsp2p	abandonaţi
Vmm-2s	abandonează
Vmm-2p	abandonaţi
Vmnp	abandona
Vmp--sm	abandonat
Vmp--sm---y	abandonatu
Vmp--sf	abandonată
Vmp--pf	abandonate
Vmp--pm	abandonaţi
Vmg	abandonând
Vmg-------y	abandonându
Va--1s	as,
Voip	trebuie
Vcip1s	sunt
Vcip3p	sunt
Vcip1s----y	-s
Vcip3p----y	-s

5.3 Adjective (A)

3.1 Type

Although it is not common practice in Romanian linguistics, one could make the distinction between qualificative and determinative adjectives. However, the attribute-value pairs proposed in this section are appropriate for the qualificative adjectives.

Attribute	value	Ro. example
Type	qualificative (f)	frumos

3.2 Degree

The default value is positive; adjectives have also comparative and superlative degrees, but in most of the cases they are expressed by means of analytical forms (e.g. comp. mai bun (better), superl. cel mai bun (the best)). A few adjectives have intrinsic etymological comparative or superlative meanings (e.g. comparatives: anterior, major; superlatives: optim, maxim, extrem etc.). The prefixes super-, extra-, ultra- etc., are quite productive in forming the quasi-analytic1 superlatives. Adjectives are characterized by gender, number and case.

Attribute	value	Ro. example
Degree	positive (p)	frumos
	comparative (c)	ulterior
	superlative (s)	extrem

3.3 Gender

Attribute	value	Ro. example
Gender	masculine (m)	bun
	feminine (f)	bună
	neuter (n)	sg.bun/pl.bune

3.4 Number

Attribute	value	Ro. example
Number	singular (s)	bun
	plural (p)	buni

3.5 Case

The adjectives present the same case syncretism as the nouns, except for few adjectives that have an additional special form for Genitive-Dative cases in plural (e.g. G.D.pl. multor).

Attribute	value	Ro. example
Case	direct(r)	bunul
	oblique (o)	bunului
	vocative (v)	bunule

3.6 Definiteness

In noun-adjective construction, the definite article may attach enclitically to either adjectives or modified nouns (never to both of them). If present, the definite article attaches to the right of the first word in the sequence.

Bunul om (The kind man)
Omul bun. (The kind man)

Attribute	value	Ro. example
Definiteness	yes (y)	bunul
	no (n)	bun

3.7 Clitic

See discussion on clitics in 2.10

Combinations

Tag	Example
Afpmsrn	bun
Afpmson	bun
Afpmsvn	bun
Afpmprn	buni
Afpmpon	buni
Afpmpvn	buni
Afpmsry	bunul
Afpmsoy	bunului
Afpmpry	bunii
Afpmpoy	bunilor
Afpfsrn	bună
Afpfsvn	bună
Afpfson	bune
Afpfprn	bune
Afpfpon	bune
Afpfpvn	bune
Afpfsry	buna
Afpfsoy	bunei
Afpfpry	bunele
Afpfpoy	bunelor
Afcmsrn	ulterior
Afcmson	ulterior
Afsmsrn	extrem
Afp	gri

5.4 Pronoun (P)

4.1 Type

In Romanian it is worth differentiating the negative pronoun from other indefinite pronouns: a negative pronoun cannot be an argument for a verb unless the verb itself is negated too (e.g. Nu am văzut pe nimeni / *Am văzut pe nimeni).

Attribute	value	Ro. example
Type	demonstrative(d)	acesta
	indefinite (i)	oricine
	possesive(s)	(al) meu
	int_rel (w)	ce
	personal(p)	eu
	reflexive(x)	se
	negative (z)	nimeni
	emphatic (h)	însumi

4.2 Person

Attribute	value	Ro. example
Person	first (1)	eu
	second (2)	tu
	third (3)	el

4.3 Gender

Attribute	value	Ro. example
Gender	masculine (m)	el
	feminine (f)	ea
	neuter (n)	sg.acesta/pl.acestea

4.4 Number

Attribute	value	Ro. example
Number	singular (s)	eu
	plural (p)	noi

4.5 Case

For the second person of the personal pronoun in both singular and plural there is the vocative case too.The direct and oblique values are needed for the syncretic causal forms of the other pronouns than the personal ones.

Attribute	value	Ro. example
Case	nominative (n)	el
	genitive (g)	(al) lui
	dative (d)	lui
	accusative (a)	(pe) el
	vocative (v)	tu, voi!
	direct(r)	acesta
	oblique (o)	acestuia

4.6 Owner_Number

This attribute is meaningful for the Possessive pronouns and refers to the grammatical number of the possessor.

Attribute	value	Ro. example
Owner_Number	singular (s)	meu
	plural (p)	nostru

The gramatical number of the possesed object(s) is expressed by the attribute Number (described above).

4.7 Owner_Gender

This attribute is irrelevant for Romanian.

4.8 Clitic

See discussion on clitics in 2.10.

4.9, 4.10, 4.11, 4.12, 4.13 Referent_Type, Syntactic_Type, Definiteness, Animate, Clitic_s

These attributes are irrelevant for Romanian.

4.14 Pronoun_Form

For Romanian we need an attribute (called Pronoun_Form) to make the distinction between strong and weak forms of the same pronoun. All the weak forms can be adjoined to the adjacent words both proclitically or enclitically. In such cases the junction is always graphically marked by a hyphen between the pronoun and the neighboring word. The hyphen also marks possible elisions from either pronoun or the adjacent word. Although in traditional grammar books the demonstrative, int_rel and indefinite pronouns are not characterised by person, in our dictionaries they are recorded (for reasons beyond morpho-lexical encoding) as 3rd person (the same as nouns). However, for the automatic tagging this value has been marked as irrelevant.

Attribute	value	Ro. example
Pronoun_Form	strong (s)	lui
	weak (w)	îi, i-

Combinations

Tag	Example
Pp1msn--------s	eu
Pp1msd--------w	mi
Pp1msd--------s	mie
Pp1msd--y-----s	mi-
Pd-msr	acesta
Pd-mso	acestuia
Pi-mpr	toţi
Ps1fsrs	mea
Pw-mso	cărui
Pn-msr	nimeni
Ph1msr	însumi
Ph1fsr	însămi
Px3msa--------s	sine
Px3msa--------w	se
Px3msa--y-----w	s-

5.5 Determiner (D)

5.1 Type

The need for a negative value of the determiners' Type attribute is argued on the same lines as in the section on pronoun' s Type. In Romanian the negative determiner is expressed by the unit nici + indefinite article (e.g. nici un, nici o). In Romanian, there are specific forms for the so-called emphatic determiner, which may accompany both a noun and a personal pronoun: fata însăşi (the girl herself), also ea însăşi (she herself).

Attribute	value	Ro. example
Type	demonstrative (d)	acest
	indefinite (i)	orice
	possessive (s)	meu
	int_rel (w)	ce
	negative (z)	nici un
	emphatic (h)	însuşi

5.2 Person

This attribute is meaningful for the Possessive determiners and refers to the grammatical person of the possessor.

Attribute	value	Ro. example
Person	first (1)	meu
	second (2)	tău
	third (3)	său

5.3 Gender

Attribute	value	Ro. example
Gender	masculine (m)	meu
	feminine (f)	mea
	neuter (n)	sg.meu/pl.mele

5.4 Number

Attribute	value	Ro. example
Number	singular (s)	meu
	plural (p)	mei

5.5 Case

Attribute	value	Ro. example

Case	direct(d)	aceasta
	oblique (o)	acestei

5.6 Owner_Number

This attribute is meaningful for the Possessive determiners and refers to the grammatical number of the possessor.

Attribute	value	Ro. example
Owner_Number	singular (s)	meu
	plural (p)	nostru

5.7 Owner_Gender

This attribute is irrelevant for Romanian.

5.8 Clitic

See discussion on clitics in 2.10.

Attribute	value	Ro. example
Clitic	no (n)	mama mea
	yes (y)	maică- mea

5.9 Modific_Type

As mentioned in the corresponding section on Pronoun, the Modific_Type attribute is relevant for some determiners too. The prenominal determiner always precedes the noun (e.g.acest băiat - this boy), whereas the postnominal determiner appears only after the noun (e.g. băiatul acesta - this boy).

Attribute	value	Ro. example
Modific_Type	prenominal (e)	acest
	postnominal (o)	acesta

Combinations

Tag	Example
Dd-mso---e	acestui
Dd-mso---o	acestuia
Di-mpr	toţi
Ds1fsrs	mea
Dw-msr	care
Dw-mso	cărui
Dz-msr	nici_un
Dh1msr	însumi
Dh1fsr	însămi

Although in traditional grammar books the demonstrative, indefinite and int_rel determiners are not characterised by person, in our dictionaries they are recorded (for reasons beyond morpho-lexical encoding) as 3rd person (the same as nouns). However, for the automatic tagging this value has been marked as irrelevant.

5.6 Article (T)

6.1 Type

Although it presents only a few items, the article in Romanian has four types, unlike in most of the European languages. Beside the two recommended types: definite and indefinite which have the generally known semantic value, Romanian uses two additional types of articles, which are semantically subordinated to the definite article but which have special forms and meanings:

- the possessive article (also called genitival article) is an element in the structure of the possessive pronoun, of the ordinal numeral (e.g. al meu (mine) and al treilea (the third)), and of the indefinite genitive forms of the nouns (e.g. capitol al cărţii (chapter of the book)).

- the demonstrative article links a definite noun to its determinants, links a numeral or an adjective to a noun, and it is a constituent part of the relative superlative (e.g. fata cea mare (the elder girl), cel lenes, (the lazy), respectively prietenul cel mai bun (the best friend)).

Notice that the definite article has only enclitic forms, except for one proclitical form (lui + proper noun: lui Ion).

Attribute	value	Ro. example
Type	definite (f)	lui
	indefinite (i)	un
	possessive (s)	al
	demonstrative (d)	cel

6.2 Gender

Attribute	value	Ro. example
Gender	masculine (m)	un
	feminine (f)	o
	neuter (n)	sg.cel/pl.cele

6.3 Number

Attribute	value	Ro. example
Number	singular (s)	un
	plural (p)	nişte

6.4 Case

Attribute	value	Ro. example
Case	direct(r)	cel
	oblique (o)	celui

6.5 Clitic

The inflected forms of the foreign-origin words (mainly nouns) not fully assimilated, are usually written with a hyphen between the base-form and the inflectional ending. In our encoding, we classified these endings (which are supposed to be split by the segmenter) as clitic articles (clitic attribute is always "y") which can be either definite (type=f, "-istul") or indefinite (type=i, "ist") and are characterised by gender (gender=m, "ist"; gender=f, "istă"), number (number=s, "ist"; number=p, "işti") and case (case=r, "istul"; case=o, "istului").

Combinations

Tag	Example
Tfmso	lui
Tffso	lui
Timsr	un
Tsmpr	ai
Tdfso	celei
Timsry	-ist
Timsoy	-ist
Tfmsry	-istul
Tfmsoy	-istului

5.7 Adverb (R)

7.1 Type

The distinction proposed here considers the principal syntactic properties of the adverbs. For Romanian, the general type includes most of the pronominal adverbs (demonstrative: aici (here),

indefinite: oriunde (anywhere)). As argued before for pronouns and determiners, a distinct negative value is needed for adverbs as well (nicăieri - nowhere, niciodată - never). The particle type covers those adverbs which can dislocate verbal compound forms (ex. Ea a tot cântat -- She has ever sung) or mark degrees (ex. circa (about), foarte (very), prea (too)). Such adverbs are cam, mai, prea, şi, tot, foarte etc. A useful distinction in Romanian considers the adverbs which can have predicative role, that is they can govern a subordinate sentence (ex. Fireşte că o ştiu -- Certainly I know it). Here (for uniformity within a multilingual environment), they are squeezed into the modifier class. No formal distinction is made between the interrogative adverbs and the relative ones.

Attribute	value	Ro. example
Type	general (g)	bine, acolo
	particle (p)	mai, cam
	negative (z)	nicăieri
	modifier (m)	fireşte, poate
	int_rel (w)	cum
	portmanteau (c)	ca

The "portmanteau" type of adverb was introduced to cover some few words which can be both adverbs and conjunctions (with adverbial reading more frequent). This was necessary for tagging purposes.

7.2 Degree

In Romanian, the comparative and superlative of adverbs is formed analytically with mai (puţin), cel mai (puţin), foarte: ex. mai repede (faster), cel mai devreme (at the earliest). Nonetheless there are some adverbs with comparative or superlative meaning (ex. optim, ulterior,. definitiv). These adverbs can be used for expressing the absolute superlative of other adverbs or adjectives: ex. extrem de bine, formidabil de frumos.

Attribute	value	Ro. example
Degree	positive (p)	bine
	comparative (c)	ulterior
	superlative (s)	extrem

7.3 Clitic

See discussion on clitics in 2.10.

Combinations

Tag	Example
Rgp	repede
Rgs	extraordinar

Rgc	ulterior
Rp	mai
Rz	nicăieri
Rm	probabil
Rw	cum

5.8 Adposition (S)

8.1 Type

It is the preposition type which is only pertinent to Romanian, although some intercalating adpositions may be seen as a sort of circumposition, for instance între...şi... (between..and...).

Attribute	value	Ro. example
Type	preposition (p)	la, pe, în

8.2 Formation

In Romanian there is a distinct class of compound prepositions. Each of them forms a formal and semantic unit, although graphically they stay unfused, e.g. de la, pe la, de pe, etc.

Attribute	value	Ro. example
Formation	simple (s)	la, pe, în
	compound (c)	de la

8.3 Case

This attribute marks the subcategorisation properties of the adpositions.

Attribute	value	Ro. example
Case	genitive (g)	înaintea
	dative (d)	datorită
	accusative (a)	la

8.4 Clitic

See discussion on clitics in 2.10.

Combinations

Tag	Example
Spsa	în
Spsay	într-
Spsd	datorită
Spca	de_la

5.9 Conjunction (C)

9.1 Type

The distinction between coordinating and subordinating conjunctions is pertinent to Romanian as well.

Attribute	value	Ro. example
Type	coordinating (c)	dar
	subordinating (s)	că, dacă
	portmanteau (r)	şi

The "portmanteau" type of conjunction applies only to the word "şi" which can be both a coordonating conjunction and an adverb. The distinctionamong these interpretations is rather tricky for the average native speaker and was a constant source of noise in automatic tagging. Therefore, for the sake of automatic processing we defined this "portmanteau" type value.

9.2 Formation

Likewise prepositions, we can distinguish two kinds of conjunctions in Romanian:

- simple conjunctions: e.g. şi,dar,deşi etc.

- conjunctions formed periphrastically, with some word/phrase combined by a conjunction: din moment ce, fără să, fat,ă de cum etc.

Attribute	value	Ro. example
Formation	simple (s)	deoarece
	compound (c)	de_vreme_ce

9.3 Coord_Type

In Romanian, there are three kinds of conjunctions depending on their usage: as such or together with other conjunctions or adverbs:

- simple, between conjuncts: Ion ori Maria (John or Mary);

- repetitive, before each conjunct: fie Ion fie Maria fie... (either John or Mary or...)

- correlative, before a conjoined phrase, it requires specific coordinators between conjuncts: atât mama cât şi tata (both mother and father).

With respect to the place of the conjunctions, most of them stay before the conjunct, except for: aşadar, deci (so), dar, însă (but), dacă (if), which also appear with expressive value inside the conjoined sentence.

Attribute	value	Ro. example
Coord-Type	simple (s)	dar,deoarece
	repetit (r)	fie...fie...
	correlat (c)	atît...cât şi

9.4 Sub_Type

In Romanian, each conjunction requires another mood, so that the diversity may be controlled by subcategorisation rules.

Attribute	value	Ro. example
Sub-Type	negative (z)	nici
	positive (p)	dar

This attribute distinguishes among the positive and negative conjunctions, providing means to control verbal double negation, (as in case of the negative pronouns, determiners and adverbs): nici NU am venit, nimeni NU vorbeşte, nici_un tren N-a trecut, nicăieri N-am văzut

9.5 Clitic

See discussion on clitics in 2.10.

Attribute	value	Ro. example
Clitic	no (n)	că aşa
	yes (y)	c-aşa

Combinations

Tag	Example
Crssp	şi
Ccssp	dar
Ccrsp	fie...fie
Csrsz	nici...nici
Csscp	de_vreme_ce

5.10 Numeral (M)

10.1 Type

Traditional Romanian grammars usually distinguish seven numeral types, where five of them have specific forms and the other two are obtained by composition.

The first group is made up by the following numeral types: cardinal (trei-three), ordinal (al treilea-the third), fractional (treime-one third), multiple (întreit-trine), collective (amândoi-both).

The second group contains the numeral types which are composed by means of other parts of speech: distributive (câte trei-...each three...), adverbial (de trei ori-thrice) and again the collective numeral which also has compound forms (toţi trei-all three). Nonetheless, as the numerals of the second group have a weak syntactic cohesion, namely each composition element may be regarded as an element of the sentence, with its own grammatical function, these last numeral types are irrelevant for the morphosyntactic annotation.

Attribute	value	Ro. example
Type	cardinal (c)	trei
	ordinal (o)	(al) treilea
	fractal (f)	treime
	multiple (m)	întreit
	collect(l)	tustrei

In Romanian (as in many other languages) several numerals have noun behaviour (some grammarians classify such numerals as nouns) with gender and declension of their own, which they preserve even in the composition of the superior order numerals; these are, for instance, sută (hundred), mie (thousand), milion (million) and miliard (billion). In a sentence most numerals may fulfill the function of other parts of speech like noun, determiner or adverb.

10.2 Gender

Attribute	value	Ro. example
Gender	masculine (m)	doi, primul
	feminine (f)	două, prima
	neuter (n)	(un) milion, (două) milioane

10.3 Number

Attribute	value	Ro. example
Number	singular (s)	primul
	plural (p)	primii

10.4 Case

Attribute	value	Ro. example
Case	direct(r)	primul
	oblique (o)	primului

10.5 Form

Attribute	value	Ro. example
Form	digit (d)	1690
	letter (l)	unsprezece
	both (b)	5 mii
	roman (r)	XIV

10.6 Definiteness

By virtue of their noun or adjective value, some numerals may take the enclitic article (prim/primul - first/the first). Consequently for the Romanian, definiteness attribute helps distinguish the enclitic forms from the other forms.

Attribute	value	Ro. example
Definiteness	yes (y)	primul
	no (n)	prim

10.7 Clitic

See discussion on clitics in 2.10.

Combinations

Tag	Example
Mcmprl	doi
Mcmpol	doi
Momsrl	doilea
Momsol	doilea
Mlmpr	amândoi
Momsrlyy	primu-i
Mffpoly	treimilor

5.11 Interjections (I)

In Romanian there are no relevant subcategories of interjections.

Tag	Example
I	oh,ah,au

5.12 Residual (X)

No attributes are defined for this category.

Tag	Example
X	show, a+b, retro-

5.13 Abbreviation (Y)

The Syntactic_Type attribute is useful for specifying the grammatical category of an abbreviation. Although the values for this attribute could range over the part of speech categories in the language, in Romanian most of the abbreviations falls into noun class.

13.1 Syntactic_Type

Attribute	value	Ro. example
Syntactic_Type	nominal(n)	d-na (doamna)
	verbal (v)	v. (vezi)
	adjectival (a)	ant. (anterior)
	adverbial(r)	f. (foarte)
	pronominal(p)	d-ei (dumneaei)

13.2 Gender

Attribute	value	Ro. example
Gender	masculine (m)	d-lui
	feminine (f)	d-na
	neuter(n)	apt.

13.3 Number

Attribute	value	Ro. example
Number	singular (s)	d-na
	plural (p)	d-nele

13.4 Case

Attribute	value	Ro. example
Case	direct (r)	d-na
	oblique (o)	d-nei

13.5 Definiteness

Attribute	value	Ro. example
Definiteness	yes (y)	d-nele
	no (n)	d-ne

Combinations

Tag	Example
Ynmsry	d-ul
Ynfsoy	d-nei
Ynnsry	apt.

5.14 Particle (Q)

14.1 Type

Attribute	value	Ro. example
Type	negation(z)	nu,n-
	infinitive (n)	a
	subjunctive (s)	să
	aspect	fi
	future	o

14.2 Formation

This attribute is not relevant for Romanian.

14.3 Clitic

See discussion on clitics in 2.10.

Attribute	value	Ro. example
Clitic	yes (y)	n-am
	no (n)	nu am

Combinations

Tag	Example
Qz	nu
Qz-y	n-
Qn	a
Qs	să
Qa	fi
Qf	o

Chapter 6

Application to Slovene

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6.1 Introduction

The first version of these specifications was produced in the scope of the MULTEXT-East project. The tables and lexicon are described in T. Erjavec: The MULTEXT-East Slovene Lexicon. ERK'98, ⟨*http://nl.ijs.si/et/Bib/ERK98/erk/*⟩.

The second version of the guidelines was produced for the FIDA Slovene reference corpus, ⟨*http://www.fida.net/*⟩. Here the specifications were revised and localised to Slovene. Finally, the harmonisation of the FIDA version with the common Multext-East one was accomplished in the context of the Concede project.

The rest of this report is structured as follows: we first give the table of categories and then a section for all the Parts of Speech distinguished in Slovene.

For each PoS we first give the table of feature values, based on the common MULTEXT-East tables. In addition to giving the English terms each attribute-value table gives also the Slovene names of the attributes, their values and their MSD codes. This localised specification enables not only automatic expansion of e.g. the MSD `Ncmsa-n` to `Noun common masculine singular accusative -animate` but also the translation into `Somet-n`, meaning `Samostalnik občno_ime moški ednina tožilnik -živost`.

Each PoS section contains, in addition to the attribute-value tables, also a section with 'feature co-occurrence restrictions' for the allowed combinations and a listing with enumerated allowed (lexical) MSDs. The listing accompanies each MSD with an example word-form and lemma.

Because the Slovene tables are based on the common MULTEXT-East ones, new attributes introduced in FIDA had to be added at the tail. This leads in some cases to ungainly MSDs; for

example, the new Verb attribute of Aspect has position 14, leading to MSDs such as `Von------e`. In the future, it might be worth investigating a 'minimum length method of localisation' where attributes are allowed to be locally permuted, or change the original MULTEXT tables, to allow East languages to place lexical attributes towards the beginning of the MSDs.

6.2 Table of Categories

```
=============== ======= =============== =======
PoS-en          Code-en PoS-sl          Code-sl
=============== ======= =============== =======
Noun            N       Samostalnik     S
Verb            V       Glagol          G
Adjective       A       Pridevnik       P
Adverb          R       Prislov         R
Pronoun         P       Zaimek          Z
Adposition      S       Predlog         D
Conjunction     C       Veznik          V
Particle        Q       Členek          L
Interjection    I       Medmet          M
Numeral         M       Števnik         K
Abbreviation    Y       Okrajšava       O
Residual        X       Neuvrščeno      N
Article         -       Člen            -
Determiner      -                       -
=============== ======= =============== =======
```

Notes:

- The order of the categories above is different from the one in the common tables for MULTEXT-East languages.
- The category Article (Slovene: 'člen') exists for Slovene, but it encompasses only two words ('ta' / this, 'en' / one) and even these are used only colloquially. Furthermore, these two words can also function as a pronoun or numeral respectively. As it would be difficult to disambiguate between the categories, Article is not used for Slovene.

6.3 Noun (N) // Samostalnik (S)

P	ATT-en	VAL-en	C-en	ATT-sl	VAL-sl	C-sl
1	Type	common	c	vrsta	občno_ime	o
		proper	p		lastno_ime	l
2	Gender	masculine	m	spol	moški	m
		feminine	f		ženski	z
		neuter	n		srednji	s
3	Number	singular	s	število	ednina	e
		plural	p		množina	m
		dual	d		dvojina	d
4	Case	nominative	n	sklon	imenovalnik	i
		genitive	g		rodilnik	r
		dative	d		dajalnik	d
		accusative	a		tožilnik	t
		locative	l		mestnik	m
		instrumental	i		orodnik	o
5	Definiteness		-			-
6	Clitic		-			-
7	Animate	no	n	živost	ne	n
		yes	y		da	d
8	Owner_Number		-			
9	Owner_Person		-			
10	Owned_Number		-			

Notes:

- The 'deverbal noun' or 'gerund' is marked as a Noun, e.g. from the Verb 'iskati' we get 'iskanje', Ncnsn.
- Animacy is marked only on the Noun masculine singular accusative (N*msa).
- Feminine declension masculine nouns have two Ncmsa forms, both are marked as animate, e.g. vodjo / vodja are both Ncmsa–y.

Combinations

PoS	Type	Gend	Numb	Case	(Def)	(Cltc)	Anim	Examples
N	p	[mfn]	s	n				Janez, Micka, Kršo
N	p	[mfn]	s	g				Janeza, Micke, Krša
N	p	[mfn]	s	d				Janezu, Micki, Kršu
N	p	m	s	a	-	-	n	Kranj
N	p	m	s	a	-	-	y	Janeza
N	p	[fn]	s	a				Micko, Kršo
N	p	[mfn]	s	l				Janezu, Micki, Kršu
N	p	[mfn]	s	i				Janezom, Micko, Kršom
N	p	[mf]	p	n				Slovenci, Slovenke
N	p	[mf]	p	g				Slovencov, Slovenk
N	p	[mf]	p	d				Slovencom, Slovenkam
N	p	[mf]	p	a				Slovenci, Slovenke
N	p	[mf]	p	l				Slovencih, Slovenkah
N	p	[mf]	p	i				Slovenci, Slovenkami
N	p	[mf]	d	n				Slovenca, Slovenki
N	p	[mf]	d	g				Slovencov, Slovenk
N	p	[mf]	d	d				Slovencoma, Slovenkama
N	p	[mf]	d	a				Slovenca, Slovenki
N	p	[mf]	d	l				Slovencih, Slovenkah
N	p	[mf]	d	i				Slovenci, Slovenkama
N	c	[mfn]	s	n				stol, lipa, sonce
N	c	[mfn]	s	g				stola, lipe, sonca
N	c	[mfn]	s	d				stolu, lipi, soncu
N	c	m	s	a	-	-	n	stol
N	c	m	s	a	-	-	y	gospoda
N	c	[fn]	s	a				lipo, sonce
N	c	[mfn]	s	l				stolu, lipi, soncu
N	c	[mfn]	s	i				stolom, lipo, soncem
N	c	[mfn]	p	n				stoli, lipe, sonca
N	c	[mfn]	p	g				stolov, lip, sonc
N	c	[mfn]	p	d				stolom, lipam, soncem
N	c	[mfn]	p	a				stole, lipe, sonca
N	c	[mfn]	p	l				stolih, lipah, soncih
N	c	[mfn]	p	i				stoli, lipami, sonci
N	c	[mfn]	d	n				stola, lipi, sonci
N	c	[mfn]	d	g				stolov, lip, sonc
N	c	[mfn]	d	d				stoloma, lipama, soncema
N	c	[mfn]	d	a				stola, lipi, sonci
N	c	[mfn]	d	l				stolih, lipah, soncih
N	c	[mfn]	d	i				stoloma, lipama, soncem

Lexicon

98 MSDs:

Ncfda(čački / čačka) Ncfdd(čačkama / čačka) Ncfdg(čačk / čačka) Ncfdi(čačkama / čačka) Ncfdl(čačkah / čačka) Ncfdn(čački / čačka) Ncfpa(čačke / čačka) Ncfpd(čačkam / čačka) Ncfpg(čačk / čačka) Ncfpi(čačkami / čačka) Ncfpl(čačkah / čačka) Ncfpn(čačke / čačka) Ncfsa(čačko / čačka) Ncfsd(čački / čačka) Ncfsg(čačke / čačka) Ncfsi(čačko / čačka) Ncfsl(čački / čačka) Ncfsn(čačka / =) Ncmda(čaja / čaj) Ncmdd(čajema / čaj) Ncmdg(čajev / čaj) Ncmdi(čajema / čaj) Ncmdl(čajih / čaj) Ncmdn(čaja / čaj) Ncmpa(čaje / čaj) Ncmpd(čajem / čaj) Ncmpg(čajev / čaj) Ncmpi(čaji / čaj) Ncmpl(čajih / čaj) Ncmpn(čaji / čaj) Ncmsa–n(čaj / čaj) Ncmsa–y(čarodeja / čarodej) Ncmsd(čajniku / čajnik) Ncmsg(čaja / čaj) Ncmsi(čajem / čaj) Ncmsl(čajniku / čajnik) Ncmsn(čaj / =) Ncnda(čaščenji / čaščenje) Ncndd(čaščenjema / čaščenje) Ncndg(čaščenj / čaščenje) Ncndi(čaščenjema / čaščenje) Ncndl(čaščenjih / čaščenje) Ncndn(čaščenji / čaščenje) Ncnpa(čaščenja / čaščenje) Ncnpd(čaščenjem / čaščenje) Ncnpg(čaščenj / čaščenje) Ncnpi(čaščenji / čaščenje) Ncnpl(čaščenjih / čaščenje) Ncnpn(čaščenja / čaščenje) Ncnsa(čaščenje / čaščenje) Ncnsd(čaščenju / čaščenje) Ncnsg(čaščenja / čaščenje) Ncnsi(čaščenjem / čaščenje) Ncnsl(čaščenju / čaščenje) Ncnsn(čaščenje / =) Npfda(Čehinji / Čehinja) Npfdd(Čehinjama / Čehinja) Npfdg(Čehinj / Čehinja) Npfdi(Čehinjama / Čehinja) Npfdl(Čehinjah / Čehinja) Npfdn(Čehinji / Čehinja) Npfpa(Čehinje / Čehinja) Npfpd(Čehinjam / Čehinja) Npfpg(Čehinj / Čehinja) Npfpi(Čehinjami / Čehinja) Npfpl(Čehinjah / Čehinja) Npfpn(Čehinje / Čehinja) Npfsa(Češko / Češka) Npfsd(Češki / Češka) Npfsg(Češke / Češka) Npfsi(Češko / Češka) Npfsl(Češki / Češka) Npfsn(Češka / =) Npmda(Čajkovska / Čajkovski) Npmdd(Čajkovskima / Čajkovski) Npmdg(Čajkovskih / Čajkovski) Npmdi(Čajkovskima / Čajkovski) Npmdl(Čajkovskih / Čajkovski) Npmdn(Čajkovska / Čajkovski) Npmpa(Čajkovske / Čajkovski) Npmpd(Čajkovskim / Čajkovski) Npmpg(Čajkovskih / Čajkovski) Npmpi(Čajkovskimi / Čajkovski) Npmpl(Čajkovskih / Čajkovski) Npmpn(Čajkovski / =) Npmsa–n(Črnomelj / Črnomelj) Npmsa–y(Čajkovskega / Čajkovski) Npmsd(Čajkovskemu / Čajkovski) Npmsg(Čajkovskega / Čajkovski) Npmsi(Čajkovskim / Čajkovski) Npmsl(Čajkovskem / Čajkovski) Npmsn(Čajkovski / =) Npnsa(Škotsko / Škotsko) Npnsd(Škotskemu / Škotsko) Npnsg(Škotskega / Škotsko) Npnsi(Škotskim / Škotsko) Npnsl(Škotskem / Škotsko) Npnsn(Škotsko / =)

6.4 Verb (V) // Glagol (G)

```
= ============== ============== ==== ============== ============== ====
P ATT-en         VAL-en         C-en ATT-sl         VAL-sl         C-sl
= ============== ============== ==== ============== ============== ====
1 Type           main           m    vrsta          polnopomenski  p
                 modal          o                   naklonski      n
                 copula         c                   vezni          v
- -------------- -------------- ---- -------------- -------------- ----
2 VForm          indicative     i    gl. oblika     povednik       p
                 imperative     m                   velelnik       v
                 conditional    c                   pogojnik       g
                 infinitive     n                   nedoločnik     n
                 participle     p                   deležnik       d
                 supine         u                   namenilnik     m
- -------------- -------------- ---- -------------- -------------- ----
3 Tense          present        p    čas            sedanjik       s
                 future         f                   prihodnjik     p
                 past           s                   nesedanjik     r
- -------------- -------------- ---- -------------- -------------- ----
4 Person         first          1    oseba          prva           1
                 second         2                   druga          2
                 third          3                   tretja         3
- -------------- -------------- ---- -------------- -------------- ----
5 Number         singular       s    število        ednina         e
                 plural         p                   množina        m
                 dual           d                   dvojina        d
- -------------- -------------- ---- -------------- -------------- ----
6 Gender         masculine      m    spol           moški          m
                 feminine       f                   ženski         z
                 neuter         n                   srednji        s
******************************* **** ************** ************** ****
7 Voice          active         a    način          tvornik        t
                 passive        p                   trpni_deležnik r
- -------------- -------------- ---- -------------- -------------- ----
8 Negative       no             n    nikalnost      nezanikani     n
                 yes            y                   zanikani       d
- -------------- -------------- ---- -------------- -------------- ----
9 Definiteness                  -
- -------------- -------------- -
10Clitic                        -
- -------------- -------------- -
11Case                          -
- -------------- -------------- -
12Animate                       -
- -------------- -------------- -
```

```
13Clitic_s                         -
- -------------- -------------- ---- -------------- -------------- ----
14Aspect  !NEW!  progressive    p    vid            nedovršni      n
                 perfective     e                   dovršni        d
= ============================ ==== ============== ============== ====
```


Notes:

- The verb 'to be' / 'biti' in all its functions is Type=c;
- The "past participle" is used for making all the compound active tenses (future, past, pulperfect) and is encoded analytically as Type=participle, Tense=past, Voice=Active.
- The passive participles is encoded analytically as Type=participle, Tense='-', Voice=Passive. This encoding will only be used for the passive participle in the predicative position, e.g. 'on je bil tepen' / he was beaten. The case marked passive participles in the attributive position (e.g. 'tepen pes' / beaten dog) or those in non-nominative case (e.g. 'hrano imam skuhano' / I have the food cooked[acc]) will be classified as (qualitative) adjectives.
- The adjectival (e.g. 'stokajoč' / moaning) and adverbial (e.g. 'leže' / lying down) participles are classified as adjectives and adverbs respectively.
- Negative is always marked as 'n' except for two verbs: 'nočem' / not to want, 'nisem' / not to be

Combinations

```
*** **** **** **** **** **** **** ---- ---- ======================
PoS Type VFrm Tens Pers Numb Gend Voic Neg  Examples
*** **** **** **** **** **** **** ---- ---- ======================
 V   c    n    -    -    -    -    -    -   biti
 V   c    c    -    -    -    -    -    -   bi
 V   c    m    p    1   [pd]  -    -    -   bodimo, bodiva
 V   c    m    p    2   [spd] -    -    -   bodi, bodite, bodita
 V   c    i    f  [123] [spd] -    -    -   bom, boš, bo, bomo, bova,...
 V   c    i    p  [123] [spd] -    - [ny]   nisem, ..., sem, si, je, smo, ...
 V   c    p    s    -   [spd][mfn] a    -   bil, bila, bili, ...

 V   o    n    -    -     -    -    -    -  hoteti
 V   o    m    p    1   [pd]  -    -    -   dovolimo, dovoliva
 V   o    m    p    2   [spd] -    -    -   dovoli, dovolite, dovolita
 V   o    i    p  [123] [spd]  -   - [ny]   nočem, ..., hočem, hočeš
 V   o    p    s    -   [spd][mfn] a    -   smel, smela, smeli,...
 V   o    p    -    -   [spd][mfn] p    -   dovoljen, dovoljeni, ...

 V   m    n    -    -    -    -    -    -   delati
 V   m    u    -    -    -    -    -    -   delat
 V   m    m    p    1   [pd]  -    -    -   delajmo, delajva
 V   m    m    p    2   [spd] -    -    -   delaj, delajte, delajta
 V   m    i    p  [123] [spd] -    - [ny]   nimam, delam, delava, delamo
 V   m    p    -    -   [spd][mfn] p    -   dovoljen, dovoljeni, ...
 V   m    p    s    -   [spd][mfn] p    -   dovolil, dovolili, ...
*** **** **** **** **** **** **** ---- ---- ======================
```

Lexicon

128 MSDs:

Vcc(bi / biti) Vcif1d(bova / biti) Vcif1p(bomo / biti) Vcif1s(bom / biti) Vcif2d(bosta / biti) Vcif2p(boste / biti) Vcif2s(boš / biti) Vcif3d(bosta / biti) Vcif3p(bodo / biti) Vcif3s(bo / biti) Vcip1d–n(sva / biti) Vcip1d–y(nisva / biti) Vcip1p–n(smo / biti) Vcip1p–y(nismo / biti) Vcip1s–n(sem / biti) Vcip1s–y(nisem / biti) Vcip2d–n(sta / biti) Vcip2d–y(nista / biti) Vcip2p–n(ste / biti) Vcip2p–y(niste / biti) Vcip2s–n(si / biti) Vcip2s–y(nisi / biti) Vcip3d–n(sta / biti) Vcip3d–y(nista / biti) Vcip3p–n(so / biti) Vcip3p–y(niso / biti) Vcip3s–n(je / biti) Vcip3s–y(ni / biti) Vcmp1d(bodiva / biti) Vcmp1p(bodimo / biti) Vcmp2d(bodita / biti) Vcmp2p(bodite / biti) Vcmp2s(bodi / biti) Vcn(biti / =) Vcps-dfa(bili / biti) Vcps-dma(bila / biti) Vcps-dna(bili / biti) Vcps-pfa(bile / biti) Vcps-pma(bili / biti) Vcps-pna(bila / biti) Vcps-sfa(bila / biti) Vcps-sma(bil / biti) Vcps-sna(bilo / biti) Vmip1d–n(čakava / čakati) Vmip1d–y(nimava / imeti) Vmip1p–n(čakamo / čakati) Vmip1p–y(nimamo / imeti) Vmip1s–n(čakam / čakati) Vmip1s–y(nimam / imeti) Vmip2d–n(čakata / čakati) Vmip2d–y(nimata / imeti) Vmip2p–n(čakate / čakati) Vmip2p–y(nimate / imeti) Vmip2s–n(čakaš / čakati) Vmip2s–y(nimaš / imeti) Vmip3d–n(čakata / čakati) Vmip3d–y(nimata / imeti) Vmip3p–n(čakajo / čakati) Vmip3p–y(nimajo / imeti) Vmip3s–n(čaka / čakati) Vmip3s–y(nima / imeti) Vmmp1d(čakajva / čakati) Vmmp1p(čakajmo / čakati) Vmmp2d(čakajta / čakati) Vmmp2p(čakajte / čakati) Vmmp2s(čakaj / čakati) Vmn(čakati / =) Vmp–dfp(čaščeni / častiti) Vmp–dmp(čaščena / častiti) Vmp–dnp(čaščeni / častiti) Vmp–pfp(čaščene / častiti) Vmp–pmp(čaščeni / častiti) Vmp–pnp(čaščena / častiti) Vmp–sfp(čaščena / častiti) Vmp–smp(čaščen / častiti) Vmp–snp(čaščeno / častiti) Vmps-dfa(čakali / čakati) Vmps-dma(čakala / čakati) Vmps-dna(čakali / čakati) Vmps-pfa(čakale / čakati) Vmps-pma(čakali / čakati) Vmps-pna(čakala / čakati) Vmps-sfa(čakala / čakati) Vmps-sma(čakal / čakati) Vmps-sna(čakalo / čakati) Vmu(čakat / čakati) Voip1d–n(želiva / želeti) Voip1d–y(nočeva / hoteti) Voip1p–n(želimo / želeti) Voip1p–y(nočemo / hoteti) Voip1s–n(želim / želeti) Voip1s–y(nočem / hoteti) Voip2d–n(želita / želeti) Voip2d–y(nočeta / hoteti) Voip2p–n(želite / želeti) Voip2p–y(nočete / hoteti) Voip2s–n(želiš / želeti) Voip2s–y(nočeš / hoteti) Voip3d–n(želita / želeti) Voip3d–y(nočeta / hoteti) Voip3p–n(želijo / želeti) Voip3p–y(nočejo / hoteti) Voip3s–n(želi / želeti) Voip3s–y(noče / hoteti) Vomp1d(želiva / želeti) Vomp1p(želimo / želeti) Vomp2d(želita / želeti) Vomp2p(želite / želeti) Vomp2s(želi / želeti) Von(želeti / =) Vop–dfp(želeni / želeti) Vop–dmp(želena / želeti) Vop–dnp(želeni / želeti) Vop–pfp(želene / želeti) Vop–pmp(želeni / želeti) Vop–pnp(želena / želeti) Vop–sfp(želena / želeti) Vop–smp(želen / želeti) Vop–snp(želeno / želeti) Vops-dfa(želeli / želeti) Vops-dma(želela / želeti) Vops-dna(želeli / želeti) Vops-pfa(želele / želeti) Vops-pma(želeli / želeti) Vops-pna(želela / želeti) Vops-sfa(želela / želeti) Vops-sma(želel / želeti) Vops-sna(želelo / želeti)

6.5 Adjective (A) // Pridevnik (P)

P	ATT-en	VAL-en	C-en	ATT-sl	VAL-sl	C-sl
1	Type	qualificative	f	vrsta	kakovostni	k
		possessive	s		svojilni	s
	l.s.	ordinal	o		vrstni	v
2	Degree	positive	p	stopnja	osnovnik	o
		comparative	c		primernik	p
		superlative	s		presežnik	s
	!NEW!	elative	e		elativ	e
3	Gender	masculine	m	spol	moški	m
		feminine	f		ženski	z
		neuter	n		srednji	s
4	Number	singular	s	število	ednina	e
		plural	p		množina	m
		dual	d		dvojina	d
5	Case	nominative	n	sklon	imenovalnik	i
		genitive	g		rodilnik	r
		dative	d		dajalnik	d
		accusative	a		tožilnik	t
		locative	l		mestnik	m
		instrumental	i		orodnik	o
*	**************	**************	****	**************	**************	****
6	Definiteness	no	n	določnost	ne	n
		yes	y		da	d
7	Clitic		-			-
8	Animate	no	n	živost	ne	n
		yes	y		da	d
9	Formation		-			
10	Owner_Number		-			
11	Owner_Person		-			
12	Owned_Number		-			

Notes:

- The three deverbative adjectival participles (part. -l, part -n / t, part. č) are also classified as qualificative adjectives. e.g. 'otekel (obraz), premagan, (sovrag) govoreč (pes)' are marked Afpmsn.

- Definiteness (-i ending = yes, -0 = no) is marked only on the Adjective qualificative positive masculine singular nominative (Afpmsn) and syncretic accusative (Afpmsa). The uninflecting 'poceni' has no definiteness.

- Animacy is marked only (-ega ending = yes, else = no) on the Adjective masculine singular accusative (A**msa*-[ny]). Afpmsa has three forms: no-Definiteness, +Animate; -Definiteness, -Animate; +Definiteness, -Animate. The uninflecting 'poceni' has no animacy or definiteness.

- Some (26) adjectives have the additional 'archaic' indefinite form also (-a- and -e-, both weak and thus absent from all oblique forms): 'hladan' in addition to 'hladen' / cold, both with Afpmsnn (non-definite) and syncretic Afpmsan-n (non-definite, non-animate). This could be encoded (but isn't) in the Formation attribute.

  These are the archaic Afpmsnn: šibak dolžan droban gnojan grenak hladan krasan krepak krotak lahak mehak močan motan nemočan plehak prešibak premočan pretežak rosan sladak strašan svetal težak teman tesan voljan

Combinations

```
*** **** **** **** **** **** ---- ---- ---- ================================
PoS Type Degr Gend Numb Case Def (Cltc)Anim Examples
*** **** **** **** **** **** ---- ---- ---- ================================
 A   s     p [mfs][spd][ngdali] -    -   -   stričev, galjotove, ...
 A   o     p [mfs][spd][ngdali] -    -   -   dlakocepski, slovenskega, ...
 A   f     p   m   s      n   [ny]   -   -   lep, lepi
 A   f     p   m   s      a   [ny]   -   n   lep, lepi
 A   f     p   m   s      a     -    -   y   lepega
 A   f     p   m   s    [gdli]  -    -   -   lepega, lepemu, lepem, lepim
 A   f     p   m  [pd] [ngdali] -    -   -   lepi, lepih, ..., lepa, ...
 A   f     p  [fs][spd][ngdali] -    -   -   lepa, lepe, ..., lepo, ...
 A   f   [cs][mfs][spd][ngdali] -    -   -   lepši, lepšega,...,najlepši,...
*** **** **** **** **** **** ==========================================
```

Lexicon

279 MSDs:

Afcfda(čistejši / čist) Afcfdd(čistejšima / čist) Afcfdg(čistejših / čist) Afcfdi(čistejšima / čist) Afcfdl(čistejših / čist) Afcfdn(čistejši / čist) Afcfpa(čistejše / čist) Afcfpd(čistejšim / čist) Afcfpg(čistejših / čist) Afcfpi(čistejšimi / čist) Afcfpl(čistejših / čist) Afcfpn(čistejše / čist) Afcfsa(čistejšo / čist) Afcfsd(čistejši / čist) Afcfsg(čistejše / čist) Afcfsi(čistejšo / čist) Afcfsl(čistejši / čist) Afcfsn(čistejša / čist) Afcmda(čistejša / čist) Afcmdd(čistejšima / čist) Afcmdg(čistejših / čist) Afcmdi(čistejšima / čist) Afcmdl(čistejših / čist) Afcmdn(čistejša / čist) Afcmpa(čistejše / čist) Afcmpd(čistejšim / čist) Afcmpg(čistejših / čist) Afcmpi(čistejšimi / čist)

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Aopmsn(čarovniški / =) Aopnda(čarovniški / čarovniški) Aopndd(čarovniškima / čarovniški) Aopndg(čarovniških / čarovniški) Aopndi(čarovniškima / čarovniški) Aopndl(čarovniških / čarovniški) Aopndn(čarovniški / čarovniški) Aopnpa(čarovniška / čarovniški) Aopnpd(čarovniškim / čarovniški) Aopnpg(čarovniških / čarovniški) Aopnpi(čarovniškimi / čarovniški) Aopnpl(čarovniških / čarovniški) Aopnpn(čarovniška / čarovniški) Aopnsa(čarovniško / čarovniški) Aopnsd(čarovniškemu / čarovniški) Aopnsg(čarovniškega / čarovniški) Aopnsi(čarovniškim / čarovniški) Aopnsl(čarovniškem / čarovniški) Aopnsn(čarovniško / čarovniški) Aspfda(Šeligovi / Šeligov) Aspfdd(Šeligovima / Šeligov) Aspfdg(Šeligovih / Šeligov) Aspfdi(Šeligovima / Šeligov) Aspfdl(Šeligovih / Šeligov) Aspfdn(Šeligovi / Šeligov) Aspfpa(Šeligove / Šeligov) Aspfpd(Šeligovim / Šeligov) Aspfpg(Šeligovih / Šeligov) Aspfpi(Šeligovimi / Šeligov) Aspfpl(Šeligovih / Šeligov) Aspfpn(Šeligove / Šeligov) Aspfsa(Šeligovo / Šeligov) Aspfsd(Šeligovi / Šeligov) Aspfsg(Šeligove / Šeligov) Aspfsi(Šeligovo / Šeligov) Aspfsl(Šeligovi / Šeligov) Aspfsn(Šeligova / Šeligov) Aspmda(Šeligova / Šeligov) Aspmdd(Šeligovima / Šeligov) Aspmdg(Šeligovih / Šeligov) Aspmdi(Šeligovima / Šeligov) Aspmdl(Šeligovih / Šeligov) Aspmdn(Šeligova / Šeligov) Aspmpa(Šeligove / Šeligov) Aspmpd(Šeligovim / Šeligov) Aspmpg(Šeligovih / Šeligov) Aspmpi(Šeligovimi / Šeligov) Aspmpl(Šeligovih / Šeligov) Aspmpn(Šeligovi / Šeligov) Aspmsa–n(Šeligov / Šeligov) Aspmsa–y(Šeligovega / Šeligov) Aspmsd(Šeligovemu / Šeligov) Aspmsg(Šeligovega / Šeligov) Aspmsi(Šeligovim / Šeligov) Aspmsl(Šeligovem / Šeligov) Aspmsn(Šeligov / =) Aspnda(Šeligovi / Šeligov) Aspndd(Šeligovima / Šeligov) Aspndg(Šeligovih / Šeligov) Aspndi(Šeligovima / Šeligov) Aspndl(Šeligovih / Šeligov) Aspndn(Šeligovi / Šeligov) Aspnpa(Šeligova / Šeligov) Aspnpd(Šeligovim / Šeligov) Aspnpg(Šeligovih / Šeligov) Aspnpi(Šeligovimi / Šeligov) Aspnpl(Šeligovih / Šeligov) Aspnpn(Šeligova / Šeligov) Aspnsa(Šeligovo / Šeligov) Aspnsd(Šeligovemu / Šeligov) Aspnsg(Šeligovega / Šeligov) Aspnsi(Šeligovim / Šeligov) Aspnsl(Šeligovem / Šeligov) Aspnsn(Šeligovo / Šeligov)

6.6 Adverb (R) // Prislov (R)

P	ATT-en	VAL-en	C-en	ATT-sl	VAL-sl	C-sl
1	Type	general	g	vrsta	splošni	s
2	Degree	positive	p	stopnja	osnovnik	o
		comparative	c		primernik	p
		superlative	s		presežnik	r
!NEW!		elative	e		elativ	e
3	Clitic		-			
4	Number		-			
5	Person		-			

Notes:

- The adverbial (e.g. part -e: 'leže' / lying down) participles are classified as adverbs.
- Some pronouns can also have an adverbial function. This issue has not been considered here.

Combinations

PoS	Type	Degr	Examples
R	g	p	bljuvaje
R	g	c	kasneje
R	g	s	najprijazneje
R	g	e	???

Lexicon

3 MSDs:

Rgc(čistejše / čist) Rgp(Šeligovo / Šeligov) Rgs(najčistejše / čist)

6.7 Pronoun (P) // Zaimek (Z)

P	ATT-en	VAL-en	C-en	ATT-sl	VAL-sl	C-sl
1	Type	personal	p	vrsta	osebni	o
		demonstrative	d		kazalni	k
		indefinite	i		nedoločnostni	n
		possessive	s		svojilni	s
		interrogative	q		vprašalni	v
		relative	r		oziralnostni	z
		reflexive	x		povratni	p
		negative	z		nikalni	l
		general	g		celostni	c
2	Person	first	1	oseba	prva	1
		second	2		druga	2
		third	3		tretja	3
3	Gender	masculine	m	spol	moški	m
		feminine	f		ženski	z
		neuter	n		srednji	s
4	Number	singular	s	število	ednina	e
		plural	p		množina	m
		dual	d		dvojina	d
5	Case	nominative	n	sklon	imenovalnik	i
		genitive	g		rodilnik	r
		dative	d		dajalnik	d
		accusative	a		tožilnik	t
		locative	l		mestnik	m
		instrumental	i		orodnik	o
6	Owner_Number	singular	s	št_svojine	ednina	e
		plural	p		množina	m
		dual	d		dvojina	d
7	Owner_Gender	masculine	m	sp_svojine	moški	m
		feminine	f		ženski	z
		neuter	n		srednji	s
8	Clitic	no	n	naslonka	ne	n
		yes	y		da	d
	!NEW!	bound	b		navezna	z

P	ATT-en	VAL-en	C-en	ATT-sl	VAL-sl	C-sl
9	Referent_Type	personal	p	nanašanje	osebni	o
		possessive	s		svojilni	s
10	Syntactic_Type	nominal	n	sklad_vloga	samostalniški	s
		adjectival	a		pridevniški	p
	!NEW!	adverbial	r		prislovni	r
11	Definiteness		-			-
12	Animate	no	n	živost	ne	n
		yes	y		da	d
13	Clitic_s		-			
14	Pronoun_Form		-			
15	Owner_Person		-			
16	Owned_Number		-			

Notes:

- The Type taxonomy for pronouns is different from the one of Slovene grammars. Mostly Sl. grammar classes were merged. In particular, the indefinite and relative types contain many of pronoun types from Slovene grammars: (nedoločnostni = nedoločni + poljubnostni + mnogostni + istostni + drugostni) (oziralnostni = oziralni + oziralno poljubnostni)
- Type=relative includes so called 'relative general' (oziralno poljubnostni) pronouns. They can consist of two words, where the second is 'koli'. Variant spelling exists: 'kolikorkoli', 'kolikor koli'. Possible solution: they can be treated as compounds.
- Type=reflexive ecompasses all reflexive pronouns (sebe, se, sebi, si, svoj) as well as 'se' and 'si' in all their roles. Personal and possessive reflexives are further distinguished via the Referent_Type attribute. 'se' and 'si' in their roles as an obligatory but dislocated constituent' of reflexive verbs have the unique MSD Px——y. 'se' can also appear as a suffix: e.g. 'zase' / for_oneself with variant spelling 'za se'.
- Owner_Gender is relevant only for third person singular possessive pronouns, and distinguishes only masculine and feminine forms. It will be '-' in all other cases.
- As in Slovene grammars, pronouns are distinguished between having a nominal and adjectival function. All pronoun types except demonstrative and possessive can be nominal, and all except personal can be adjectival. However, the distinction is often hard to make in practice.
- Referent_Type is used to distinguish personal reflexives (which include 'se' in all its functions) from the possesive reflexives ('svoj').

- Animacy is marked only on the masculine singular accusative (P..msa) of non-personal Pronouns. The P..msa ending with -ega ending is +Animate, the other -Animate, cf. Nouns and Adjectives.

Combinations

PoS	Type	Pers	Gend	Numb	Case	PosN	PosG	Clc	Ref	Syn	Def	Ani	Examples
P	x	-	-	-	-	-	-	y	-	-	-	-	se, si
P	x	-	-	-	[gdali]	-	-	y	p	n	-	-	se, si,...
P	x	-	-	-	[gdali]	-	-	n	p	n	-	-	sebe,sebi,...
P	x	-	m	s	a	-	-	-	s	a	-	[ny]	svoj, svojega
P	x	-	m	s	[ngdli]	-	-	-	s	a	-	-	svoj, svojega,...
P	x	-	m	[pd]	[ngdali]	-	-	-	s	a	-	-	svoji, svoja,...
P	x	-	[fn]	[spd]	[ngdali]	-	-	-	s	a	-	-	svoja, svoje,...
P	p	[123]	-	[spd]	[ngdali]	-	-	[ny]	-	a	-	-	njega, ga, jih, ...
P	s	[12]	[mfn]	[spd]	[ngdali]	[spd]	-	-	-	a	-	[ny]	moj, vajinima, ...
P	s	[3]	[mfn]	[spd]	[ngdali]	s	[mfn]	-	-	a	-	[ny]	njegov, njen, njegova,...
P	s	[3]	[mfn]	[spd]	[ngdali]	[pd]	-	-	-	a	-	[ny]	njihova, njuna, ...
P	d	-	-	-	-	-	-	-	-	a	-	-	le-tega, onega, ...
P	d	-	[mfn]	[spd]	[ngdali]	-	-	-	-	[an]	-	[ny]	le-ta, le-tega, onega, ...
P	i	-	-	-	-	-	-	-	-	a	-	-	koliko, čigar
P	i	-	-	-	[ngdali]	-	-	-	-	n	-	-	kaj, marsikaj, ...
P	i	-	[mfn]	[spd]	[ngdali]	-	-	-	-	[an]	-	[ny]	en, tegale, drug, ...
P	q	-	-	-	-	-	-	-	-	a	-	-	koliko
P	q	-	-	-	[ngdali]	-	-	-	-	n	-	-	kaj, česa, kdo, ...
P	q	-	[mfn]	[spd]	[ngdali]	-	-	-	-	a	-	[ny]	kakšen, kateri, ...
P	r	-	-	-	-	-	-	-	-	a	-	-	kolikor, čigar
P	r	-	-	-	[ngdali]	-	-	-	-	n	-	-	kar, česar, kdorkoli, ...
P	r	-	[mfn]	[spd]	[ngdali]	-	-	-	-	a	-	[ny]	kakršen, kateri
P	z	-	-	-	-	-	-	-	-	a	-	-	nič, nikogar, noben
P	z	-	-	-	[gdali]	-	-	-	-	n	-	-	nikogar, nikomur, ...
P	z	-	[mfn]	[spd]	[ngdali]	-	-	-	-	a	-	[ny]	nikakršen, noben
P	g	-	-	-	-	-	-	-	-	a	-	-	vsakogar
P	g	-	-	-	[ngdali]	-	-	-	-	n	-	-	vsakdo, vsakogar, ...
P	g	-	[mfn]	[spd]	[ngdali]	-	-	-	-	[an]	-	[ny]	ves, vsega, vsa, vsak, ...

Lexicon

1335 MSDs:

Pd———a(le-onega / =) Pd-fda—-a(le-oni / le-oni) Pd-fda—-n(le-te / le-ta) Pd-fdd—-a(le-onima / le-oni) Pd-fdd—-n(le-tema / le-ta) Pd-fdg—-a(le-onih / le-oni) Pd-fdg—-n(le-teh / le-ta) Pd-fdi—-a(le-onima / le-oni) Pd-fdi—-n(le-tema / le-ta) Pd-fdl—-a(le-onih / le-oni) Pd-fdl—-n(le-teh / le-ta) Pd-fdn—-a(le-oni / le-oni) Pd-fdn—-n(le-te / le-ta) Pd-fpa—-a(le-one / le-oni) Pd-fpa—-n(le-te / le-ta) Pd-fpd—-a(le-onim / le-oni) Pd-fpd—-n(le-tem / le-ta) Pd-fpg—-a(le-onih / le-oni) Pd-fpg—-n(le-teh / le-ta) Pd-fpi—-a(le-onimi / le-oni) Pd-fpi—-n(le-temi / le-ta) Pd-fpl—-a(le-onih / le-oni) Pd-fpl—-n(le-teh / le-ta) Pd-fpn—-a(le-one / le-oni) Pd-fpn—-n(le-te / le-ta) Pd-fsa—-a(le-ono / le-oni) Pd-fsa—-n(le-to / le-ta) Pd-fsd—-a(le-oni / le-oni) Pd-fsd—-n(le-tej / le-ta) Pd-fsg—-a(le-one / le-oni) Pd-fsg—-n(le-te / le-ta) Pd-fsi—-a(le-ono / le-oni) Pd-fsi—-n(le-to / le-ta) Pd-fsl—-a(le-oni / le-oni) Pd-fsl—-n(le-tej / le-ta) Pd-fsn—-a(le-ona / le-oni) Pd-fsn—-n(le-ta / le-ta) Pd-mda—-a(le-ona / le-oni) Pd-mda—-n(le-ta / le-ta) Pd-mdd—-a(le-onima / le-oni) Pd-mdd—-n(le-tema / le-ta) Pd-mdg—-a(le-onih / le-oni) Pd-mdg—-n(le-teh / le-ta) Pd-mdi—-a(le-onima / le-oni) Pd-mdi—-n(le-tema / le-ta) Pd-mdl—-a(le-onih / le-oni) Pd-mdl—-n(le-teh / le-ta) Pd-mdn—-a(le-ona / le-oni) Pd-mdn—-n(le-ta / le-ta) Pd-mpa—-a(le-one / le-oni) Pd-mpa—-n(le-te / le-ta) Pd-mpd—-a(le-onim / le-oni) Pd-mpd—-n(le-tem / le-ta) Pd-mpg—-a(le-onih / le-oni) Pd-mpg—-n(le-teh / le-ta) Pd-mpi—-a(le-onimi / le-oni) Pd-mpi—-n(le-temi / le-ta) Pd-mpl—-a(le-onih / le-oni) Pd-mpl—-n(le-teh / le-ta) Pd-mpn—-a(le-oni / le-oni) Pd-mpn—-n(le-ti / le-ta) Pd-msa—-a-n(le-oni / le-oni) Pd-msa—-a-y(le-onega / le-oni) Pd-msa—-n-n(le-ta / le-ta) Pd-msa—-n-y(le-tega / le-ta) Pd-msd—-a(le-onemu / le-oni) Pd-msd—-n(le-temu / le-ta) Pd-msg—-a(le-onega / le-oni) Pd-msg—-n(le-tega / le-ta) Pd-msi—-a(le-onim / le-oni) Pd-msi—-n(le-tem / le-ta) Pd-msl—-a(le-onem / le-oni) Pd-msl—-n(le-tem / le-ta) Pd-msn—-a(le-oni / =) Pd-msn—-n(le-ta / =) Pd-nda—-a(le-oni / le-oni) Pd-nda—-n(le-te / le-ta) Pd-ndd—-a(le-onima / le-oni) Pd-ndd—-n(le-tema / le-ta) Pd-ndg—-a(le-onih / le-oni) Pd-ndg—-n(le-teh / le-ta) Pd-ndi—-a(le-onima / le-oni) Pd-ndi—-n(le-tema / le-ta) Pd-ndl—-a(le-onih / le-oni) Pd-ndl—-n(le-teh / le-ta) Pd-ndn—-a(le-oni / le-oni) Pd-ndn—-n(le-te / le-ta) Pd-npa—-a(le-ona / le-oni) Pd-npa—-n(le-ta / le-ta) Pd-npd—-a(le-onim / le-oni) Pd-npd—-n(le-tem / le-ta) Pd-npg—-a(le-onih / le-oni) Pd-npg—-n(le-teh / le-ta) Pd-npi—-a(le-onimi / le-oni) Pd-npi—-n(le-temi / le-ta) Pd-npl—-a(le-onih / le-oni) Pd-npl—-n(le-teh / le-ta) Pd-npn—-a(le-ona / le-oni) Pd-npn—-n(le-ta / le-ta) Pd-nsa—-a(le-ono / le-oni) Pd-nsa—-n(le-to / le-ta) Pd-nsd—-a(le-onemu / le-oni) Pd-nsd—-n(le-temu / le-ta) Pd-nsg—-a(le-onega / le-oni) Pd-nsg—-n(le-tega / le-ta) Pd-nsi—-a(le-onim / le-oni) Pd-nsi—-n(le-tem / le-ta) Pd-nsl—-a(le-onem / le-oni) Pd-nsl—-n(le-tem / le-ta) Pd-nsn—-a(le-ono / le-oni) Pd-nsn—-n(le-to / le-ta) Pg———a(vsakogar / =) Pg—a—-n(vsakogar / vsakdo) Pg—d—-n(vsakomur / vsakdo) Pg—g—-n(vsakogar / vsakdo) Pg—i—-n(vsakomer / vsakdo) Pg—l—-n(vsakomer / vsakdo) Pg—n—-n(vsakdo / =) Pg-fda—-a(obe / oba) Pg-fda—-n(obe / oba) Pg-fdd—-a(obema / oba) Pg-fdd—-n(obema / oba) Pg-fdg—-a(obeh / oba) Pg-fdg—-n(obeh / oba) Pg-fdi—-a(obema / oba) Pg-fdi—-n(obema / oba) Pg-fdl—-a(obeh / oba) Pg-fdl—-n(obeh / oba) Pg-fdn—-a(obe / oba) Pg-fdn—-n(obe / oba) Pg-fpa—-a(vsake / vsak) Pg-fpa—-n(vse / ves) Pg-fpd—-a(vsakim / vsak) Pg-fpd—-n(vsem / ves) Pg-fpg—-a(vsakih / vsak) Pg-fpg—-n(vseh / ves) Pg-fpi—-a(vsakimi / vsak) Pg-fpi—-n(vsemi / ves) Pg-fpl—-a(vsakih / vsak) Pg-fpl—-n(vseh / ves) Pg-fpn—-a(vsake / vsak) Pg-fpn—-n(vse / ves) Pg-fsa—-a(vsako / vsak) Pg-fsa—-n(vso / ves) Pg-fsd—-a(vsaki / vsak) Pg-fsd—-n(vsej / ves) Pg-fsg—-a(vsake / vsak) Pg-fsg—-n(vse / ves) Pg-fsi—-a(vsako / vsak) Pg-fsi—-n(vso / ves) Pg-fsl—-a(vsaki / vsak) Pg-fsl—-n(vsej / ves) Pg-fsn—-a(vsa / ves) Pg-fsn—-n(vsa / ves) Pg-mda—-a(oba / oba) Pg-mda—-n(oba / oba) Pg-mdd—-a(obema / oba) Pg-mdd—-n(obema / oba) Pg-mdg—-a(obeh / oba) Pg-mdg—-n(obeh / oba) Pg-mdi—-a(obema / oba) Pg-mdi—-n(obema / oba) Pg-mdl—-a(obeh / oba) Pg-mdl—-n(obeh / oba) Pg-mdn—-a(oba / oba) Pg-mdn—-n(oba / oba) Pg-mpa—-a(vsake / vsak) Pg-mpa—-n(vse / ves) Pg-mpd—-a(vsakim / vsak) Pg-mpd—-n(vsem / ves) Pg-mpg—-a(vsakih / vsak) Pg-mpg—-n(vseh / ves) Pg-mpi—-a(vsakimi / vsak) Pg-mpi—-n(vsemi / ves) Pg-mpl—-a(vsakih / vsak) Pg-mpl—-n(vseh / ves) Pg-mpn—-a(vsaki / vsak) Pg-mpn—-n(vsi / ves) Pg-msa—-a-n(ves / ves) Pg-msa—-a-y(vsakega / vsak) Pg-msa—-n-n(ves

/ ves) Pg-msa—-n-y(vsega / ves) Pg-msd—-a(vsakemu / vsak) Pg-msd—-n(vsemu / ves) Pg-msg—-a(vsakega / vsak) Pg-msg—-n(vsega / ves) Pg-msi—-a(vsakim / vsak) Pg-msi—-n(vsem / ves) Pg-msl—-a(vsakem / vsak) Pg-msl—-n(vsem / ves) Pg-msn—-a(ves / =) Pg-msn—-n(ves / =) Pg-nda—-a(obe / oba) Pg-nda—-n(obe / oba) Pg-ndd—-a(obema / oba) Pg-ndd—-n(obema / oba) Pg-ndg—-a(obeh / oba) Pg-ndg—-n(obeh / oba) Pg-ndi—-a(obema / oba) Pg-ndi—-n(obema / oba) Pg-ndl—-a(obeh / oba) Pg-ndl—-n(obeh / oba) Pg-ndn—-a(obe / oba) Pg-ndn—-n(obe / oba) Pg-npa—-a(vsa / ves) Pg-npa—-n(vsa / ves) Pg-npd—-a(vsakim / vsak) Pg-npd—-n(vsem / ves) Pg-npg—-a(vsakih / vsak) Pg-npg—-n(vseh / ves) Pg-npi—-a(vsakimi / vsak) Pg-npi—-n(vsemi / ves) Pg-npl—-a(vsakih / vsak) Pg-npl—-n(vseh / ves) Pg-npn—-a(vsa / ves) Pg-npn—-n(vsa / ves) Pg-nsa—-a(vsako / vsak) Pg-nsa—-n(vse / ves) Pg-nsd—-a(vsakemu / vsak) Pg-nsd—-n(vsemu / ves) Pg-nsg—-a(vsakega / vsak) Pg-nsg—-n(vsega / ves) Pg-nsi—-a(vsakim / vsak) Pg-nsi—-n(vsem / ves) Pg-nsl—-a(vsakem / vsak) Pg-nsl—-n(vsem / ves) Pg-nsn—-a(vsako / vsak) Pg-nsn—-n(vse / ves) Pi———a(drugega / =) Pi—a—-n(kaj / kaj) Pi—d—-n(čemu / kaj) Pi—g—-n(česa / kaj) Pi—i—-n(čim / kaj) Pi—l—-n(čem / kaj) Pi—n—-n(kaj / =) Pi-fda—-a(čigavi / čigav) Pi-fda—-n(drugi / drug) Pi-fdd—-a(čigavima / čigav) Pi-fdd—-n(drugima / drug) Pi-fdg—-a(čigavih / čigav) Pi-fdg—-n(drugih / drug) Pi-fdi—-a(čigavima / čigav) Pi-fdi—-n(drugima / drug) Pi-fdl—-a(čigavih / čigav) Pi-fdl—-n(drugih / drug) Pi-fdn—-a(čigavi / čigav) Pi-fdn—-n(drugi / drug) Pi-fpa—-a(čigave / čigav) Pi-fpa—-n(druge / drug) Pi-fpd—-a(čigavim / čigav) Pi-fpd—-n(drugim / drug) Pi-fpg—-a(čigavih / čigav) Pi-fpg—-n(drugih / drug) Pi-fpi—-a(čigavimi / čigav) Pi-fpi—-n(drugimi / drug) Pi-fpl—-a(čigavih / čigav) Pi-fpl—-n(drugih / drug) Pi-fpn—-a(čigave / čigav) Pi-fpn—-n(druge / drug) Pi-fsa—-a(čigavo / čigav) Pi-fsa—-n(drugo / drug) Pi-fsd—-a(čigavi / čigav) Pi-fsd—-n(drugi / drug) Pi-fsg—-a(čigave / čigav) Pi-fsg—-n(druge / drug) Pi-fsi—-a(čigavo / čigav) Pi-fsi—-n(drugo / drug) Pi-fsl—-a(čigavi / čigav) Pi-fsl—-n(drugi / drug) Pi-fsn—-a(čigava / čigav) Pi-fsn—-n(druga / drug) Pi-mda—-a(čigava / čigav) Pi-mda—-n(druga / drug) Pi-mdd—-a(čigavima / čigav) Pi-mdd—-n(drugima / drug) Pi-mdg—-a(čigavih / čigav) Pi-mdg—-n(drugih / drug) Pi-mdi—-a(čigavima / čigav) Pi-mdi—-n(drugima / drug) Pi-mdl—-a(čigavih / čigav) Pi-mdl—-n(drugih / drug) Pi-mdn—-a(čigava / čigav) Pi-mdn—-n(druga / drug) Pi-mpa—-a(čigave / čigav) Pi-mpa—-n(druge / drug) Pi-mpd—-a(čigavim / čigav) Pi-mpd—-n(drugim / drug) Pi-mpg—-a(čigavih / čigav) Pi-mpg—-n(drugih / drug) Pi-mpi—-a(čigavimi / čigav) Pi-mpi—-n(drugimi / drug) Pi-mpl—-a(čigavih / čigav) Pi-mpl—-n(drugih / drug) Pi-mpn—-a(čigavi / čigav) Pi-mpn—-n(drugi / drug) Pi-msa—-a-n(čigav / čigav) Pi-msa—-a-y(čigavega / čigav) Pi-msa—-n-n(drug / drug) Pi-msa—-n-y(drugega / drug) Pi-msd—-a(čigavemu / čigav) Pi-msd—-n(drugemu / drug) Pi-msg—-a(čigavega / čigav) Pi-msg—-n(drugega / drug) Pi-msi—-a(čigavim / čigav) Pi-msi—-n(drugim / drug) Pi-msl—-a(čigavem / čigav) Pi-msl—-n(drugem / drug) Pi-msn—-a(čigav / =) Pi-msn—-n(drug / =) Pi-nda—-a(čigavi / čigav) Pi-nda—-n(drugi / drug) Pi-ndd—-a(čigavima / čigav) Pi-ndd—-n(drugima / drug) Pi-ndg—-a(čigavih / čigav) Pi-ndg—-n(drugih / drug) Pi-ndi—-a(čigavima / čigav) Pi-ndi—-n(drugima / drug) Pi-ndl—-a(čigavih / čigav) Pi-ndl—-n(drugih / drug) Pi-ndn—-a(čigavi / čigav) Pi-ndn—-n(drugi / drug) Pi-npa—-a(čigava / čigav) Pi-npa—-n(druga / drug) Pi-npd—-a(čigavim / čigav) Pi-npd—-n(drugim / drug) Pi-npg—-a(čigavih / čigav) Pi-npg—-n(drugih / drug) Pi-npi—-a(čigavimi / čigav) Pi-npi—-n(drugimi / drug) Pi-npl—-a(čigavih / čigav) Pi-npl—-n(drugih / drug) Pi-npn—-a(čigava / čigav) Pi-npn—-n(druga / drug) Pi-nsa—-a(čigavo / čigav) Pi-nsa—-n(drugo / drug) Pi-nsd—-a(čigavemu / čigav) Pi-nsd—-n(drugemu / drug) Pi-nsg—-a(čigavega / čigav) Pi-nsg—-n(drugega / drug) Pi-nsi—-a(čigavim / čigav) Pi-nsi—-n(drugim / drug) Pi-nsl—-a(čigavem / čigav) Pi-nsl—-n(drugem / drug) Pi-nsn—-a(čigavo / čigav) Pi-nsn—-n(drugo / drug) Pp1-da–n-n(naju / jaz) Pp1-da–y-n(naju / jaz) Pp1-dd–n-n(nama / jaz) Pp1-dd–y-n(nama / jaz) Pp1-dg–n-n(naju / jaz) Pp1-dg–y-n(naju / jaz) Pp1-di–n-n(nama / jaz) Pp1-dl–n-n(naju / jaz) Pp1-dn–n-n(midva / jaz) Pp1-pa–n-n(nas / jaz) Pp1-pa–y-n(nas / jaz) Pp1-pd–n-n(nam / jaz) Pp1-pd–y-n(nam / jaz) Pp1-pg–n-n(nas / jaz) Pp1-pg–y-n(nas / jaz) Pp1-pi–n-n(nami / jaz) Pp1-pl–n-n(nas / jaz) Pp1-pn–n-n(mi / jaz) Pp1-sa–n-n(mene / jaz) Pp1-sa–y-n(me / jaz) Pp1-sd–n-n(meni / jaz) Pp1-sd–y-n(mi / jaz) Pp1-sg–n-n(mene / jaz) Pp1-sg–y-n(me / jaz) Pp1-si–n-n(mano / jaz) Pp1-sl–n-n(meni / jaz) Pp1-sn–n-n(jaz / =) Pp2-da–n-n(vaju / ti) Pp2-da–y-n(vaju / ti) Pp2-dd–n-n(vama / ti) Pp2-dd–y-n(vama / ti) Pp2-dg–n-n(vaju / ti) Pp2-dg–y-n(vaju

/ ti) Pp2-di–n-n(vama / ti) Pp2-dl–n-n(vaju / ti) Pp2-dn–n-n(vidva / ti) Pp2-pa–n-n(vas / ti) Pp2-pa–y-n(vas / ti) Pp2-pd–n-n(vam / ti) Pp2-pd–y-n(vam / ti) Pp2-pg–n-n(vas / ti) Pp2-pg–y-n(vas / ti) Pp2-pi–n-n(vami / ti) Pp2-pl–n-n(vas / ti) Pp2-pn–n-n(vi / ti) Pp2-sa–n-n(tebe / ti) Pp2-sa–y-n(te / ti) Pp2-sd–n-n(tebi / ti) Pp2-sd–y-n(ti / ti) Pp2-sg–n-n(tebe / ti) Pp2-sg–y-n(te / ti) Pp2-si–n-n(tabo / ti) Pp2-sl–n-n(tebi / ti) Pp2-sn–n-n(ti / =) Pp3fda–n-n(njiju / on) Pp3fda–y-n(jih / on) Pp3fdd–n-n(njima / on) Pp3fdd–y-n(jima / on) Pp3fdg–n-n(njiju / on) Pp3fdg–y-n(jih / on) Pp3fdi–n-n(njima / on) Pp3fdl–n-n(njiju / on) Pp3fdn–n-n(onedve / on) Pp3fpa–n-n(nje / on) Pp3fpa–y-n(jih / on) Pp3fpd–n-n(njim / on) Pp3fpd–y-n(jim / on) Pp3fpg–n-n(njih / on) Pp3fpg–y-n(jih / on) Pp3fpi–n-n(njimi / on) Pp3fpl–n-n(njih / on) Pp3fpn–n-n(one / on) Pp3fsa–n-n(njo / on) Pp3fsa–y-n(jo / on) Pp3fsd–n-n(njej / on) Pp3fsd–y-n(ji / on) Pp3fsg–n-n(nje / on) Pp3fsg–y-n(je / on) Pp3fsi–n-n(njo / on) Pp3fsl–n-n(njej / on) Pp3fsn–n-n(ona / on) Pp3mda–n-n(njiju / on) Pp3mda–y-n(jih / on) Pp3mdd–n-n(njima / on) Pp3mdd–y-n(jima / on) Pp3mdg–n-n(njih / on) Pp3mdg–y-n(jih / on) Pp3mdi–n-n(njima / on) Pp3mdl–n-n(njiju / on) Pp3mdn–n-n(onadva / on) Pp3mpa–n-n(nje / on) Pp3mpa–y-n(jih / on) Pp3mpd–n-n(njim / on) Pp3mpd–y-n(jim / on) Pp3mpg–n-n(njih / on) Pp3mpg–y-n(jih / on) Pp3mpi–n-n(njimi / on) Pp3mpl–n-n(njih / on) Pp3mpn–n-n(oni / on) Pp3msa–n-n(njega / on) Pp3msa–y-n(ga / on) Pp3msd–n-n(njemu / on) Pp3msd–y-n(mu / on) Pp3msg–n-n(njega / on) Pp3msg–y-n(ga / on) Pp3msi–n-n(njim / on) Pp3msl–n-n(njem / on) Pp3msn–n-n(on / =) Pp3nda–n-n(njiju / on) Pp3nda–y-n(jih / on) Pp3ndd–n-n(njima / on) Pp3ndd–y-n(jima / on) Pp3ndg–n-n(njiju / on) Pp3ndg–y-n(jih / on) Pp3ndi–n-n(njima / on) Pp3ndl–n-n(njiju / on) Pp3ndn–n-n(onedve / on) Pp3npa–n-n(nje / on) Pp3npa–y-n(jih / on) Pp3npd–n-n(njim / on) Pp3npd–y-n(jim / on) Pp3npg–n-n(njih / on) Pp3npg–y-n(jih / on) Pp3npi–n-n(njimi / on) Pp3npl–n-n(njih / on) Pp3npn–n-n(ona / on) Pp3nsa–n-n(ono / on) Pp3nsa–y-n(ga / on) Pp3nsd–n-n(njemu / on) Pp3nsd–y-n(mu / on) Pp3nsg–n-n(njega / on) Pp3nsg–y-n(ga / on) Pp3nsi–n-n(njim / on) Pp3nsl–n-n(njem / on) Pp3nsn–n-n(ono / on) Pq———a(koliko / =) Pq—a—-n(kaj / kaj) Pq—d—-n(čemu / kaj) Pq—g—-n(česa / kaj) Pq—i—-n(čim / kaj) Pq—l—-n(čem / kaj) Pq—n—-n(kaj / =) Pq-fda—-a(čigavi / čigav) Pq-fdd—-a(čigavima / čigav) Pq-fdg—-a(čigavih / čigav) Pq-fdi—-a(čigavima / čigav) Pq-fdl—-a(čigavih / čigav) Pq-fdn—-a(čigavi / čigav) Pq-fpa—-a(čigave / čigav) Pq-fpd—-a(čigavim / čigav) Pq-fpg—-a(čigavih / čigav) Pq-fpi—-a(čigavimi / čigav) Pq-fpl—-a(čigavih / čigav) Pq-fpn—-a(čigave / čigav) Pq-fsa—-a(čigavo / čigav) Pq-fsd—-a(čigavi / čigav) Pq-fsg—-a(čigave / čigav) Pq-fsi—-a(čigavo / čigav) Pq-fsl—-a(čigavi / čigav) Pq-fsn—-a(čigava / čigav) Pq-mda—-a(čigava / čigav) Pq-mdd—-a(čigavima / čigav) Pq-mdg—-a(čigavih / čigav) Pq-mdi—-a(čigavima / čigav) Pq-mdl—-a(čigavih / čigav) Pq-mdn—-a(čigava / čigav) Pq-mpa—-a(čigave / čigav) Pq-mpd—-a(čigavim / čigav) Pq-mpg—-a(čigavih / čigav) Pq-mpi—-a(čigavimi / čigav) Pq-mpl—-a(čigavih / čigav) Pq-mpn—-a(čigavi / čigav) Pq-msa—-a-n(čigav / čigav) Pq-msa—-a-y(čigavega / čigav) Pq-msd—-a(čigavemu / čigav) Pq-msg—-a(čigavega / čigav) Pq-msi—-a(čigavim / čigav) Pq-msl—-a(čigavem / čigav) Pq-msn—-a(čigav / =) Pq-nda—-a(čigavi / čigav) Pq-ndd—-a(čigavima / čigav) Pq-ndg—-a(čigavih / čigav) Pq-ndi—-a(čigavima / čigav) Pq-ndl—-a(čigavih / čigav) Pq-ndn—-a(čigavi / čigav) Pq-npa—-a(čigava / čigav) Pq-npd—-a(čigavim / čigav) Pq-npg—-a(čigavih / čigav) Pq-npi—-a(čigavimi / čigav) Pq-npl—-a(čigavih / čigav) Pq-npn—-a(čigava / čigav) Pq-nsa—-a(čigavo / čigav) Pq-nsd—-a(čigavemu / čigav) Pq-nsg—-a(čigavega / čigav) Pq-nsi—-a(čigavim / čigav) Pq-nsl—-a(čigavem / čigav) Pq-nsn—-a(čigavo / čigav) Pr———a(čigar / =) Pr—a—-n(kar / kar) Pr—d—-n(čemur / kar) Pr—g—-n(česar / kar) Pr—i—-n(čimer / kar) Pr—l—-n(čemer / kar) Pr—n—-n(kar / =) Pr-fda—-a(kakršni / kakršen) Pr-fdd—-a(kakršnima / kakršen) Pr-fdg—-a(kakršnih / kakršen) Pr-fdi—-a(kakršnima / kakršen) Pr-fdl—-a(kakršnih / kakršen) Pr-fdn—-a(kakršni / kakršen) Pr-fpa—-a(kakršne / kakršen) Pr-fpd—-a(kakršnim / kakršen) Pr-fpg—-a(kakršnih / kakršen) Pr-fpi—-a(kakršnimi / kakršen) Pr-fpl—-a(kakršnih / kakršen) Pr-fpn—-a(kakršne / kakršen) Pr-fsa—-a(kakršno / kakršen) Pr-fsd—-a(kakršni / kakršen) Pr-fsg—-a(kakršne / kakršen) Pr-fsi—-a(kakršno / kakršen) Pr-fsl—-a(kakršni / kakršen) Pr-fsn—-a(kakršna / kakršen) Pr-mda—-a(kakršna / kakršen) Pr-mdd—-a(kakršnima / kakršen) Pr-mdg—-a(kakršnih / kakršen) Pr-mdi—-a(kakršnima / kakršen) Pr-mdl—-a(kakršnih / kakršen) Pr-mdn—-a(kakršna / kakršen) Pr-mpa—-a(kakršne / kakršen) Pr-mpd—-a(kakršnim / kakršen) Pr-mpg—-a(kakršnih / kakršen) Pr-mpi—-a(kakršnimi / kakršen) Pr-mpl—-a(kakršnih / kakršen) Pr-mpn—-

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a(njegovima / njegov) Ps3fdisn–a(njegovima / njegov) Ps3fdld—a(njunih / njun) Ps3fdlp—a(njihovih / njihov) Ps3fdlsf–a(njenih / njen) Ps3fdlsm–a(njegovih / njegov) Ps3fdlsn–a(njegovih / njegov) Ps3fdnd—a(njuni / njun) Ps3fdnp—a(njihovi / njihov) Ps3fdnsf–a(njeni / njen) Ps3fdnsm–a(njegovi / njegov) Ps3fdnsn–a(njegovi / njegov) Ps3fpad—a(njune / njun) Ps3fpap—a(njihove / njihov) Ps3fpasf–a(njene / njen) Ps3fpasm–a(njegove / njegov) Ps3fpasn–a(njegove / njegov) Ps3fpdd—a(njunim / njun) Ps3fpdp—a(njihovim / njihov) Ps3fpdsf–a(njenim / njen) Ps3fpdsm–a(njegovim / njegov) Ps3fpdsn–a(njegovim / njegov) Ps3fpgd—a(njunih / njun) Ps3fpgp—a(njihovih / njihov) Ps3fpgsf–a(njenih / njen) Ps3fpgsm–a(njegovih / njegov) Ps3fpgsn–a(njegovih / njegov) Ps3fpid—a(njunimi / njun) Ps3fpip—a(njihovimi / njihov) Ps3fpisf–a(njenimi / njen) Ps3fpism–a(njegovimi / njegov) Ps3fpisn–a(njegovimi / njegov) Ps3fpld—a(njunih / njun) Ps3fplp—a(njihovih / njihov) Ps3fplsf–a(njenih / njen) Ps3fplsm–a(njegovih / njegov) Ps3fplsn–a(njegovih / njegov) Ps3fpnd—a(njune / njun) Ps3fpnp—a(njihove / njihov) Ps3fpnsf–a(njene / njen) Ps3fpnsm–a(njegove / njegov) Ps3fpnsn–a(njegove / njegov) Ps3fsad—a(njuno / njun) Ps3fsap—a(njihovo / njihov) Ps3fsasf–a(njeno / njen) Ps3fsasm–a(njegovo / njegov) Ps3fsasn–a(njegovo / njegov) Ps3fsdd—a(njuni / njun) Ps3fsdp—a(njihovi / njihov) Ps3fsdsf–a(njeni / njen) Ps3fsdsm–a(njegovi / njegov) Ps3fsdsn–a(njegovi / njegov) Ps3fsgd—a(njune / njun) Ps3fsgp—a(njihove / njihov) Ps3fsgsf–a(njene / njen) Ps3fsgsm–a(njegove / njegov) Ps3fsgsn–a(njegove / njegov) Ps3fsid—a(njuno / njun) Ps3fsip—a(njihovo / njihov) Ps3fsisf–a(njeno / njen) Ps3fsism–a(njegovo / njegov) Ps3fsisn–a(njegovo / njegov) Ps3fsld—a(njuni / njun) Ps3fslp—a(njihovi / njihov) Ps3fslsf–a(njeni / njen) Ps3fslsm–a(njegovi / njegov) Ps3fslsn–a(njegovi / njegov) Ps3fsnd—a(njuna / njun) Ps3fsnp—a(njihova / njihov) Ps3fsnsf–a(njena / njen) Ps3fsnsm–a(njegova / njegov) Ps3fsnsn–a(njegova / njegov) Ps3mdad—a(njuna / njun) Ps3mdap—a(njihova / njihov) Ps3mdasf–a(njena / njen) Ps3mdasm–a(njegova / njegov) Ps3mdasn–a(njegova / njegov) Ps3mddd—a(njunima / njun) Ps3mddp—a(njihovima / njihov) Ps3mddsf–a(njenima / njen) Ps3mddsm–a(njegovima / njegov) Ps3mddsn–a(njegovima / njegov) Ps3mdgd—a(njunih / njun) Ps3mdgp—a(njihovih / njihov) Ps3mdgsf–a(njenih / njen) Ps3mdgsm–a(njegovih / njegov) Ps3mdgsn–a(njegovih / njegov) Ps3mdid—a(njunima / njun) Ps3mdip—a(njihovima / njihov) Ps3mdisf–a(njenima / njen) Ps3mdism–a(njegovima / njegov) Ps3mdisn–a(njegovima / njegov) Ps3mdld—a(njunih / njun) Ps3mdlp—a(njihovih / njihov) Ps3mdlsf–a(njenih / njen) Ps3mdlsm–a(njegovih / njegov) Ps3mdlsn–a(njegovih / njegov) Ps3mdnd—a(njuna / njun) Ps3mdnp—a(njihova / njihov) Ps3mdnsf–a(njena / njen) Ps3mdnsm–a(njegova / njegov) Ps3mdnsn–a(njegova / njegov) Ps3mpad—a(njune / njun) Ps3mpap—a(njihove / njihov) Ps3mpasf–a(njene / njen) Ps3mpasm–a(njegove / njegov) Ps3mpasn–a(njegove / njegov) Ps3mpdd—a(njunim / njun) Ps3mpdp—a(njihovim / njihov) Ps3mpdsf–a(njenim / njen) Ps3mpdsm–a(njegovim / njegov) Ps3mpdsn–a(njegovim / njegov) Ps3mpgd—a(njunih / njun) Ps3mpgp—a(njihovih / njihov) Ps3mpgsf–a(njenih / njen) Ps3mpgsm–a(njegovih / njegov) Ps3mpgsn–a(njegovih / njegov) Ps3mpid—a(njunimi / njun) Ps3mpip—a(njihovimi / njihov) Ps3mpisf–a(njenimi / njen) Ps3mpism–a(njegovimi / njegov) Ps3mpisn–a(njegovimi / njegov) Ps3mpld—a(njunih / njun) Ps3mplp—a(njihovih / njihov) Ps3mplsf–a(njenih / njen) Ps3mplsm–a(njegovih / njegov) Ps3mplsn–a(njegovih / njegov) Ps3mpnd—a(njuni / njun) Ps3mpnp—a(njihovi / njihov) Ps3mpnsf–a(njeni / njen) Ps3mpnsm–a(njegovi / njegov) Ps3mpnsn–a(njegovi / njegov) Ps3msad—a-n(njun / njun) Ps3msad—a-y(njunega / njun) Ps3msap—a-n(njihov / njihov) Ps3msap—a-y(njihovega / njihov) Ps3msasf–a-n(njen / njen) Ps3msasf–a-y(njenega / njen) Ps3msasm–a-n(njegov / njegov) Ps3msasm–a-y(njegovega / njegov) Ps3msasn–a-n(njegov / njegov) Ps3msasn–a-y(njegovega / njegov) Ps3msdd—a(njunemu / njun) Ps3msdp—a(njihovemu / njihov) Ps3msdsf–a(njenemu / njen) Ps3msdsm–a(njegovemu / njegov) Ps3msdsn–a(njegovemu / njegov) Ps3msgd—a(njunega / njun) Ps3msgp—a(njihovega / njihov) Ps3msgsf–a(njenega / njen) Ps3msgsm–a(njegovega / njegov) Ps3msgsn–a(njegovega / njegov) Ps3msid—a(njunim / njun) Ps3msip—a(njihovim / njihov) Ps3msisf–a(njenim / njen) Ps3msism–a(njegovim / njegov) Ps3msisn–a(njegovim / njegov) Ps3msld—a(njunem / njun) Ps3mslp—a(njihovem / njihov) Ps3mslsf–a(njenem / njen) Ps3mslsm–a(njegovem / njegov) Ps3mslsn–a(njegovem / njegov) Ps3msnd—a(njun / =) Ps3msnp—a(njihov / =) Ps3msnsf–a(njen / =) Ps3msnsm–a(njegov / =) Ps3msnsn–a(njegov / =) Ps3ndad—a(njuni / njun) Ps3ndap—a(njihovi / njihov) Ps3ndasf–a(njeni / njen) Ps3ndasm–a(njegovi / njegov) Ps3ndasn–a(njegovi / njegov) Ps3nddd—a(njunima / njun) Ps3nddp—a(njihovima

/ njihov) Ps3nddsf–a(njenima / njen) Ps3nddsm–a(njegovima / njegov) Ps3nddsn–a(njegovima / njegov) Ps3ndgd—a(njunih / njun) Ps3ndgp—a(njihovih / njihov) Ps3ndgsf–a(njenih / njen) Ps3ndgsm–a(njegovih / njegov) Ps3ndgsn–a(njegovih / njegov) Ps3ndid—a(njunima / njun) Ps3ndip—a(njihovima / njihov) Ps3ndisf–a(njenima / njen) Ps3ndism–a(njegovima / njegov) Ps3ndisn–a(njegovima / njegov) Ps3ndld—a(njunih / njun) Ps3ndlp—a(njihovih / njihov) Ps3ndlsf–a(njenih / njen) Ps3ndlsm–a(njegovih / njegov) Ps3ndlsn–a(njegovih / njegov) Ps3ndnd—a(njuni / njun) Ps3ndnp—a(njihovi / njihov) Ps3ndnsf–a(njeni / njen) Ps3ndnsm–a(njegovi / njegov) Ps3ndnsn–a(njegovi / njegov) Ps3npad—a(njuna / njun) Ps3npap—a(njihova / njihov) Ps3npasf–a(njena / njen) Ps3npasm–a(njegova / njegov) Ps3npasn–a(njegova / njegov) Ps3npdd—a(njunim / njun) Ps3npdp—a(njihovim / njihov) Ps3npdsf–a(njenim / njen) Ps3npdsm–a(njegovim / njegov) Ps3npdsn–a(njegovim / njegov) Ps3npgd—a(njunih / njun) Ps3npgp—a(njihovih / njihov) Ps3npgsf–a(njenih / njen) Ps3npgsm–a(njegovih / njegov) Ps3npgsn–a(njegovih / njegov) Ps3npid—a(njunimi / njun) Ps3npip—a(njihovimi / njihov) Ps3npisf–a(njenimi / njen) Ps3npism–a(njegovimi / njegov) Ps3npisn–a(njegovimi / njegov) Ps3npld—a(njunih / njun) Ps3nplp—a(njihovih / njihov) Ps3nplsf–a(njenih / njen) Ps3nplsm–a(njegovih / njegov) Ps3nplsn–a(njegovih / njegov) Ps3npnd—a(njuna / njun) Ps3npnp—a(njihova / njihov) Ps3npnsf–a(njena / njen) Ps3npnsm–a(njegova / njegov) Ps3npnsn–a(njegova / njegov) Ps3nsad—a(njuno / njun) Ps3nsap—a(njihovo / njihov) Ps3nsasf–a(njeno / njen) Ps3nsasm–a(njegovo / njegov) Ps3nsasn–a(njegovo / njegov) Ps3nsdd—a(njunemu / njun) Ps3nsdp—a(njihovemu / njihov) Ps3nsdsf–a(njenemu / njen) Ps3nsdsm–a(njegovemu / njegov) Ps3nsdsn–a(njegovemu / njegov) Ps3nsgd—a(njunega / njun) Ps3nsgp—a(njihovega / njihov) Ps3nsgsf–a(njenega / njen) Ps3nsgsm–a(njegovega / njegov) Ps3nsgsn–a(njegovega / njegov) Ps3nsid—a(njunim / njun) Ps3nsip—a(njihovim / njihov) Ps3nsisf–a(njenim / njen) Ps3nsism–a(njegovim / njegov) Ps3nsisn–a(njegovim / njegov) Ps3nsld—a(njunem / njun) Ps3nslp—a(njihovem / njihov) Ps3nslsf–a(njenem / njen) Ps3nslsm–a(njegovem / njegov) Ps3nslsn–a(njegovem / njegov) Ps3nsnd—a(njuno / njun) Ps3nsnp—a(njihovo / njihov) Ps3nsnsf–a(njeno / njen) Ps3nsnsm–a(njegovo / njegov) Ps3nsnsn–a(njegovo / njegov) Px——y(se / =) Px—a–npn(sebe / se) Px—a–ypn(se / se) Px—d–npn(sebi / se) Px—d–ypn(si / se) Px—g–npn(sebe / se) Px—g–ypn(se / se) Px—i–npn(sabo / se) Px—l–npn(sebi / se) Px-fda—sa(svoji / svoj) Px-fdd—sa(svojima / svoj) Px-fdg—sa(svojih / svoj) Px-fdi—sa(svojima / svoj) Px-fdl—sa(svojih / svoj) Px-fdn—sa(svoji / svoj) Px-fpa—sa(svoje / svoj) Px-fpd—sa(svojim / svoj) Px-fpg—sa(svojih / svoj) Px-fpi—sa(svojimi / svoj) Px-fpl—sa(svojih / svoj) Px-fpn—sa(svoje / svoj) Px-fsa—sa(svojo / svoj) Px-fsd—sa(svoji / svoj) Px-fsg—sa(svoje / svoj) Px-fsi—sa(svojo / svoj) Px-fsl—sa(svoji / svoj) Px-fsn—sa(svoja / svoj) Px-mda—sa(svoja / svoj) Px-mdd—sa(svojima / svoj) Px-mdg—sa(svojih / svoj) Px-mdi—sa(svojima / svoj) Px-mdl—sa(svojih / svoj) Px-mdn—sa(svoja / svoj) Px-mpa—sa(svoje / svoj) Px-mpd—sa(svojim / svoj) Px-mpg—sa(svojih / svoj) Px-mpi—sa(svojimi / svoj) Px-mpl—sa(svojih / svoj) Px-mpn—sa(svoji / svoj) Px-msa—sa-n(svoj / svoj) Px-msa—sa-y(svojega / svoj) Px-msd—sa(svojemu / svoj) Px-msg—sa(svojega / svoj) Px-msi—sa(svojim / svoj) Px-msl—sa(svojem / svoj) Px-msn—sa(svoj / =) Px-nda—sa(svoji / svoj) Px-ndd—sa(svojima / svoj) Px-ndg—sa(svojih / svoj) Px-ndi—sa(svojima / svoj) Px-ndl—sa(svojih / svoj) Px-ndn—sa(svoji / svoj) Px-npa—sa(svoja / svoj) Px-npd—sa(svojim / svoj) Px-npg—sa(svojih / svoj) Px-npi—sa(svojimi / svoj) Px-npl—sa(svojih / svoj) Px-npn—sa(svoja / svoj) Px-nsa—sa(svoje / svoj) Px-nsd—sa(svojemu / svoj) Px-nsg—sa(svojega / svoj) Px-nsi—sa(svojim / svoj) Px-nsl—sa(svojem / svoj) Px-nsn—sa(svoje / svoj) Pz———a(nič / =) Pz—a—-n(nič / nič) Pz—d—-n(ničemur / nič) Pz—g—-n(ničesar / nič) Pz—i—-n(ničimer / nič) Pz—l—-n(ničemer / nič) Pz—n—-n(nič / =) Pz-fda—-a(nikakršni / nikakršen) Pz-fdd—-a(nikakršnima / nikakršen) Pz-fdg—-a(nikakršnih / nikakršen) Pz-fdi—-a(nikakršnima / nikakršen) Pz-fdl—-a(nikakršnih / nikakršen) Pz-fdn—-a(nikakršni / nikakršen) Pz-fpa—-a(nikakršne / nikakršen) Pz-fpd—-a(nikakršnim / nikakršen) Pz-fpg—-a(nikakršnih / nikakršen) Pz-fpi—-a(nikakršnimi / nikakršen) Pz-fpl—-a(nikakršnih / nikakršen) Pz-fpn—-a(nikakršne / nikakršen) Pz-fsa—-a(nikakršno / nikakršen) Pz-fsd—-a(nikakršni / nikakršen) Pz-fsg—-a(nikakršne / nikakršen) Pz-fsi—-a(nikakršno / nikakršen) Pz-fsl—-a(nikakršni / nikakršen) Pz-fsn—-a(nikakršna / nikakršen) Pz-mda—-a(nikakršna / nikakršen) Pz-mdd—-a(nikakršnima / nikakršen) Pz-mdg—-a(nikakršnih / nikakršen) Pz-mdi—-a(nikakršnima / nikakršen) Pz-mdl—-a(nikakršnih /

nikakršen) Pz-mdn—-a(nikakršna / nikakršen) Pz-mpa—-a(nikakršne / nikakršen) Pz-mpd—-a(nikakršnim / nikakršen) Pz-mpg—-a(nikakršnih / nikakršen) Pz-mpi—-a(nikakršnimi / nikakršen) Pz-mpl—-a(nikakršnih / nikakršen) Pz-mpn—-a(nikakršni / nikakršen) Pz-msa—-a-n(nikakršen / nikakršen) Pz-msa—-a-y(nikakršnega / nikakršen) Pz-msd—-a(nikakršnemu / nikakršen) Pz-msg—-a(nikakršnega / nikakršen) Pz-msi—-a(nikakršnim / nikakršen) Pz-msl—-a(nikakršnem / nikakršen) Pz-msn—-a(nikakršen / =) Pz-nda—-a(nikakršni / nikakršen) Pz-ndd—-a(nikakršnima / nikakršen) Pz-ndg—-a(nikakršnih / nikakršen) Pz-ndi—-a(nikakršnima / nikakršen) Pz-ndl—-a(nikakršnih / nikakršen) Pz-ndn—-a(nikakršni / nikakršen) Pz-npa—-a(nikakršna / nikakršen) Pz-npd—-a(nikakršnim / nikakršen) Pz-npg—-a(nikakršnih / nikakršen) Pz-npi—-a(nikakršnimi / nikakršen) Pz-npl—-a(nikakršnih / nikakršen) Pz-npn—-a(nikakršna / nikakršen) Pz-nsa—-a(nikakršno / nikakršen) Pz-nsd—-a(nikakršnemu / nikakršen) Pz-nsg—-a(nikakršnega / nikakršen) Pz-nsi—-a(nikakršnim / nikakršen) Pz-nsl—-a(nikakršnem / nikakršen) Pz-nsn—-a(nikakršno / nikakršen)

6.8 Adposition (S) // Predlog (D)

```
= ============== ============== ==== ============== ================== ====
P ATT-en         VAL-en         C-en ATT-sl         VAL-sl             C-sl
= ============== ============== ==== ============== ================== ====
1 Type           preposition    p    vrsta          -                  p
- -------------- -------------- ---- -------------- ------------------ ----
2 Formation      simple         s    sestavljenost  enostaven          e
                 compound       c                   priponski          p
****************************** **** ************** ****************** ****
3 Case                               sklon
  (req.by prep.) genitive       g   (ki ga zahteva) rodilnik           r
                 dative         d                   dajalnik           d
                 accusative     a                   tožilnik           t
                 locative       l                   mestnik            m
                 instrumental   i                   orodnik            o
- -------------- -------------- ---- -------------- ------------------ ----
4 Clitic                        -
=================================
```

Notes:

- Slovene has prepositions only, with some arguable exceptions (e.g. 'navkljub' / in spite of), which can be pre- or postpositions. All Adpositions in the lexicon are 'prepositions', so the name of the category is directly traslated as 'Preposition', and the name of the Type as '-'.
- Although the MSDs distinguish the category 'Formation', all the prepositions in the lexicon are 'simple'.

Combinations

```
*** **** **** ---- ==========================================================
PoS Type Form  Case Examples
*** **** **** ---- ==========================================================
 S    p    c    -   zase, nase, nanj, nanjo, nanju, ...
 S    p    s    g   brez, izpred, od, ...
 S    p    s    d   k, navzlic, ...
 S    p    s    a   s, po, skozi, ...
 S    p    s    l   po, na, v, ...
 S    p    s    i   pod, s, med, ...
*** **** **** ---- ==========================================================
```

Lexicon

6 MSDs:

Spc(čezenj / čezenj) Spsa(čez / =) Spsd(h / =) Spsg(ž / =) Spsi(ž / =) Spsl(na / =)

6.9 Conjunction (C) // Veznik (V)

```
= ============== ============== ==== ============== ============== ====
P ATT-en         VAL-en         C-en ATT-sl         VAL-sl         C-sl
= ============== ============== ==== ============== ============== ====
1 Type           coordinating   c    vrsta          priredni       p
                 subordinating  s                   podredni       d
****************************** **** ************** ************** ****
2 Formation      simple         s    oblika         enobesedni     e
                 compound       c                   večbesedni     v
- -------------- -------------- ---- -------------- -------------- ----
3 Coord_Type                    -
- -------------- -------------- -
4 Sub_Type                      -
- -------------- -------------- -
5 Clitic                        -
- -------------- -------------- -
6 Number                        -
- -------------- -------------- -
7 Person                        -
=================================
```

Notes:

- According to Slov. grammar, some conjunctions are 'two-part', but these can often be either single or two-part conjunctions with identical first and second conjunct, e.g. 'ali ... ali'; such conunctions are treated as ordinary, 'one-part' conjunctions, i.e. as Formation=simple.
- Conjunctions are also classified into 'multi-word' conjunctions, e.g. 'kljub temu da' / in spite of. These conjuctions constitute one lexical 'word'; should be merged by the text tokeniser e.g.: kljub_temu_da and marked as Formation=compound.
-

Combinations

```
*** **** ---- ===============================================================
PoS Type Form Examples
*** **** ---- ===============================================================
 C    c    s   in, ali
 C    s    s   da, ki, ali
 C    s    c   medtem_ko
*** **** ====================================================================
```

Lexicon

3 MSDs:

Ccs(a/=) Csc(kljub_temu_da/=) Css(če/=)

6.10 Particle (Q) // Členek (L)

P	ATT-en	VAL-en	C-en
1	Type		-
2	Formation		-
3	Clitic		-

Notes:

- nôtes sem izgubil.

Lexicon

1 MSD: Q(še / =)

6.11 Interjection (I) // Medmet (M)

P	ATT-en	VAL-en	C-en
1	Type		-
2	Formation		-

Lexicon

1 MSD: I(ah / =)

6.12 Numeral (M) // Števnik (K)

P	ATT-en	VAL-en	C-en	ATT-sl	VAL-sl	C-sl
1	Type	cardinal	c	vrsta	glavni	g
		ordinal	o		vrstilni	v
		multiple	m		množilni	m
		special	s		drugi	d
2	Gender	masculine	m	spol	moški	m
		feminine	f		ženski	z
		neuter	n		srednji	s
3	Number	singular	s	število	ednina	e
		plural	p		množina	m
		dual	d		dvojina	d
4	Case	nominative	n	sklon	imenovalnik	i
		genitive	g		rodilnik	r
		dative	d		dajalnik	d
		accusative	a		tožilnik	t
		locative	l		mestnik	m
		instrumental	i		orodnik	o
5	Form	digit	d	zapis	arabski	a
		roman	r		rimski	b
		letter	l		besedni	r
6	Definiteness	no	n	določnost	ne	n
		yes	y		da	d
7	Clitic		-			-
8	Class		-			-
9	Animate	no	n	živost	ne	n
		yes	y		da	d
10	Owner_Number		-			
11	Owner_Person		-			
12	Owned_Number		-			

Notes:

- Numerals in Slovene can function as nouns, adjectives or adverbs, and are in grammars described as subtypes of these categories. The above classification runs counter to the established practice and is missing an important syntactic distinction.
- Definiteness (-i ending = yes, -0 = no) is marked only on the multiple and special Numerals in the nominative and accusative masculine singular. See also Def note on Adjective.
- Animacy is marked only (-ega ending = yes, else = no) on the Numerals masculine singular accusative (M*msal*–[ny]). M[ms]msal have three msa forms: no-Definiteness, +Animate; -Definiteness, -Animate; +Definiteness, -Animate. See also Anim note on Adjective.

Combinations

```
*** **** **** **** **** ---- --- --- --- ---- ===================================
PoS Type Gend Numb Case Form Def Clt Cls Anm  Examples
*** **** **** **** **** ---- --- --- --- ---- ===================================
 M    -    -    -    -    d   -    -   -   -    1984, ...
 M    -    -    -    -    r   -    -   -   -    MCMXXCIV, ...

 M    c    m    s    a    l   -    -   -   n    en
 M    c    m    s    a    l   -    -   -   y    enega
 M    c    m    s [ngdli] l   -    -   -   -    eden, en, enemu, enemu, enim
 M    c    m  [pd][ngdali]l   -    -   -   -    trije, treh, ..., dva,...
 M    c  [fs][spd][ngdali]l   -    -   -   -    ena, eno,...,tri, treh,...,dve,..

 M    o    m    s    a    l   -    -   -   n    prvi
 M    o    m    s    a    l   -    -   -   y    prvega
 M    o    m    s [ngdli] l   -    -   -   -    prvi, prvemu, ...
 M    o    m  [pd][ngdali]l   -    -   -   -    tretji, tretjih,...,drugi,...
 M    o  [fs][spd][ngdali]l   -    -   -   -    prva, prvo,...,treh,...

 M    m    m    s    n    l  [ny]  -   -   n    dvojen, dvojni
 M    m    m    s    a    l  [ny]  -   -   n    dvojen, dvojni
 M    m    m    s    a    l   -    -   -   y    dvojnega
 M    m    m    s  [gdli] l   -    -   -   -    dvojen, dvejnega, dvojnemu,...
 M    m    m  [pd][ngdali]l   -    -   -   -    dvojni, dvojna, dvojnih, ...
 M    m  [fs][spd][ngdali]l   -    -   -   -    dvojna, dvojno,..., dvojne,...

 M    s    m    s    n    l  [ny]  -   -   n    stoter, stoteri
 M    s    m    s    a    l  [ny]  -   -   n    stoter, stoteri
 M    s    m    s    a    l   -    -   -   y    stoterega
 M    s    m    s  [gdli] l   -    -   -   -    stoterega, stoteremu,...
 M    s    m  [pd][ngdali]l   -    -   -   -    stoteri, stotera,...
 M    s  [fs][spd][ngdali]l   -    -   -   -    stotera, stotero, ..., stoterih
*** **** **** **** **** ---- --- --- --- ---- ===================================
```


Lexicon

225 MSDs:

M—-r(C / =) Mcfdal(dve / dva) Mcfddl(dvema / dva) Mcfdgl(dveh / dva) Mcfdil(dvema / dva) Mcfdll(dveh / dva) Mcfdnl(dve / dva) Mcfpal(šest / šest) Mcfpdl(šestdesetim / šestdeset) Mcfpgl(šestdesetih / šestdeset) Mcfpil(šestdesetimi / šestdeset) Mcfpll(šestdesetih / šestdeset) Mcfpnl(šest / šest) Mcfsal(eno / en) Mcfsdl(eni / en) Mcfsgl(ene / en) Mcfsil(eno / en) Mcfsll(eni / en) Mcfsnl(ena / en) Mcmdal(dva / dva) Mcmddl(dvema / dva) Mcmdgl(dveh / dva) Mcmdil(dvema / dva) Mcmdll(dveh / dva) Mcmdnl(dva / =) Mcmpal(šest / šest) Mcmpdl(šestdesetim / šestdeset) Mcmpgl(šestdesetih / šestdeset) Mcmpil(šestdesetimi / šestdeset) Mcmpll(šestdesetih / šestdeset) Mcmpnl(šest / =) Mcmsal—n(en / en) Mcmsal—y(enega / en) Mcmsdl(enemu / en) Mcmsgl(enega / en) Mcmsil(enim / en) Mcmsll(enem / en) Mcmsnl(eden / =) Mcndal(dve / dva) Mcnddl(dvema / dva) Mcndgl(dveh / dva) Mcndil(dvema / dva) Mcndll(dveh / dva) Mcndnl(dve / dva) Mcnpal(šest / šest) Mcnpdl(šestdesetim / šestdeset) Mcnpgl(šestdesetih / šestdeset) Mcnpil(šestdesetimi / šestdeset) Mcnpll(šestdesetih / šestdeset) Mcnpnl(šest / šest) Mcnsal(eno / en) Mcnsdl(enemu / en) Mcnsgl(enega / en) Mcnsil(enim / en) Mcnsll(enem / en) Mcnsnl(eno / en) Mmfdal(dvojni / dvojen) Mmfddl(dvojnima / dvojen) Mmfdgl(dvojnih / dvojen) Mmfdil(dvojnima / dvojen) Mmfdll(dvojnih / dvojen) Mmfdnl(dvojni / dvojen) Mmfpal(dvojne / dvojen) Mmfpdl(dvojnim / dvojen) Mmfpgl(dvojnih / dvojen) Mmfpil(dvojnimi / dvojen) Mmfpll(dvojnih / dvojen) Mmfpnl(dvojne / dvojen) Mmfsal(dvojno / dvojen) Mmfsdl(dvojni / dvojen) Mmfsgl(dvojne / dvojen) Mmfsil(dvojno / dvojen) Mmfsll(dvojni / dvojen) Mmfsnl(dvojna / dvojen) Mmmdal(dvojna / dvojen) Mmmddl(dvojnima / dvojen) Mmmdgl(dvojnih / dvojen) Mmmdil(dvojnima / dvojen) Mmmdll(dvojnih / dvojen) Mmmdnl(dvojna / dvojen) Mmmpal(dvojne / dvojen) Mmmpdl(dvojnim / dvojen) Mmmpgl(dvojnih / dvojen) Mmmpil(dvojnimi / dvojen) Mmmpll(dvojnih / dvojen) Mmmpnl(dvojni / dvojen) Mmmsal—y(dvojnega / dvojen) Mmmsaln–n(dvojen / dvojen) Mmmsaly–n(dvojni / dvojen) Mmmsdl(dvojnemu / dvojen) Mmmsgl(dvojnega / dvojen) Mmmsil(dvojnim / dvojen) Mmmsll(dvojnem / dvojen) Mmmsnln(dvojen / =) Mmmsnly(dvojni / dvojen) Mmndal(dvojni / dvojen) Mmnddl(dvojnima / dvojen) Mmndgl(dvojnih / dvojen) Mmndil(dvojnima / dvojen) Mmndll(dvojnih / dvojen) Mmndnl(dvojni / dvojen) Mmnpal(dvojna / dvojen) Mmnpdl(dvojnim / dvojen) Mmnpgl(dvojnih / dvojen) Mmnpil(dvojnimi / dvojen) Mmnpll(dvojnih / dvojen) Mmnpnl(dvojna / dvojen) Mmnsal(dvojno / dvojen) Mmnsdl(dvojnemu / dvojen) Mmnsgl(dvojnega / dvojen) Mmnsil(dvojnim / dvojen) Mmnsll(dvojnem / dvojen) Mmnsnl(dvojno / dvojen) Mofdal(četrti / četrti) Mofddl(četrtima / četrti) Mofdgl(četrtih / četrti) Mofdil(četrtima / četrti) Mofdll(četrtih / četrti) Mofdnl(četrti / četrti) Mofpal(četrte / četrti) Mofpdl(četrtim / četrti) Mofpgl(četrtih / četrti) Mofpil(četrtimi / četrti) Mofpll(četrtih / četrti) Mofpnl(četrte / četrti) Mofsal(četrto / četrti) Mofsdl(četrti / četrti) Mofsgl(četrte / četrti) Mofsil(četrto / četrti) Mofsll(četrti / četrti) Mofsnl(četrta / četrti) Momdal(četrta / četrti) Momddl(četrtima / četrti) Momdgl(četrtih / četrti) Momdil(četrtima / četrti) Momdll(četrtih / četrti) Momdnl(četrta / četrti) Mompal(četrte / četrti) Mompdl(četrtim / četrti) Mompgl(četrtih / četrti) Mompil(četrtimi / četrti) Mompll(četrtih / četrti) Mompnl(četrti / četrti) Momsal—n(četrti / četrti) Momsal—y(četrtega / četrti) Momsdl(četrtemu / četrti) Momsgl(četrtega / četrti) Momsil(četrtim / četrti) Momsll(četrtem / četrti) Momsnl(četrti / =) Mondal(četrti / četrti) Monddl(četrtima / četrti) Mondgl(četrtih / četrti) Mondil(četrtima / četrti) Mondll(četrtih / četrti) Mondnl(četrti / četrti) Monpal(četrta / četrti) Monpdl(četrtim / četrti) Monpgl(četrtih / četrti) Monpil(četrtimi / četrti) Monpll(četrtih / četrti) Monpnl(četrta / četrti) Monsal(četrto / četrti) Monsdl(četrtemu / četrti) Monsgl(četrtega / četrti) Monsil(četrtim / četrti) Monsll(četrtem / četrti) Monsnl(četrto / četrti) Msfdal(deseteri / deseter) Msfddl(deseterima / deseter) Msfdgl(deseterih / deseter) Msfdil(deseterima / deseter) Msfdll(deseterih / deseter) Msfdnl(deseteri / deseter) Msfpal(desetere / deseter) Msfpdl(deseterim / deseter) Msfpgl(deseterih / deseter) Msfpil(deseterimi

/ deseter) Msfpll(deseterih / deseter) Msfpnl(desetere / deseter) Msfsal(desetero / deseter) Msfsdl(deseteri / deseter) Msfsgl(desetere / deseter) Msfsil(desetero / deseter) Msfsll(deseteri / deseter) Msfsnl(desetera / deseter) Msmdal(desetera / deseter) Msmddl(deseterima / deseter) Msmdgl(deseterih / deseter) Msmdil(deseterima / deseter) Msmdll(deseterih / deseter) Msmdnl(desetera / deseter) Msmpal(desetere / deseter) Msmpdl(deseterim / deseter) Msmpgl(deseterih / deseter) Msmpil(deseterimi / deseter) Msmpll(deseterih / deseter) Msmpnl(deseteri / deseter) Msmsal—y(deseterega / deseter) Msmsaln–n(deseter / deseter) Msmsaly–n(dvakratni / dvakraten) Msmsdl(deseteremu / deseter) Msmsgl(deseterega / deseter) Msmsil(deseterim / deseter) Msmsll(deseterem / deseter) Msmsnln(deseter / =) Msmsnly(dvakratni / dvakraten) Msndal(deseteri / deseter) Msnddl(deseterima / deseter) Msndgl(deseterih / deseter) Msndil(deseterima / deseter) Msndll(deseterih / deseter) Msndnl(deseteri / deseter) Msnpal(desetera / deseter) Msnpdl(deseterim / deseter) Msnpgl(deseterih / deseter) Msnpil(deseterimi / deseter) Msnpll(deseterih / deseter) Msnpnl(desetera / deseter) Msnsal(desetero / deseter) Msnsdl(deseteremu / deseter) Msnsgl(deseterega / deseter) Msnsil(deseterim / deseter) Msnsll(deseterem / deseter) Msnsnl(desetero / deseter)

6.13 Abbreviation (Y) // Okrajšava (O)

```
= ============== ============== ====
P ATT-en         VAL-en         C-en
= ============== ============== ====
1 Syntactic_Type                -
- -------------- -------------- ----
2 Gender                        -
- -------------- -------------- -
3 Number                        -
- -------------- -------------- ----
4 Case                          -
- -------------- -------------- ----
5 Definiteness                  -
====================================
```

Notes:

- Sem sodijo tako krajšave kot kratice.

Lexicon

1 MSD: Y(št. / =)

6.14 Residual (X) // Neuvrščeno (N)

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
```

Lexicon

1 MSD: Generation X

Chapter 7

Application to Czech

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Acknowledgements:
The most appreciated base used for the elaboration of the application was constituted by morphosyntactic tables for Czech elaborated by Hana Skoumalová. For all possible errors solely the author is to blame.

7.1 Noun (N)

1.1. Lexicon

P	ATT	VAL	C	Example	Czech term
1	Type	common	c	kniha	obecné jméno
		proper	p	Petr	vlastní jméno
2	Gender	masculine	m	otec	masculinum
		feminine	f	kniha	femininum
		neuter	n	slunce	neutrum
3	Number	singular	s	kniha	singulár
		plural	p	knihy	plurál
		dual	d	rukama	duál
4	Case	nominative	n	kniha	nominativ
		genitive	g	knihy	genitiv
		dative	d	knize	dativ
		accusative	a	knihu	akuzativ
		vocative	v	kniho!	vokativ
		locative	l	knize	lokál
		instrumental	i	knihou	instrumentál

P	ATT	VAL	C	Example	Czech term
5	Definiteness		-		
6	Clitic		-		
7	Animate	l.s. no	n	hrad	neživotné
		l.s. yes	y	otec	životné
8	Owner_Number		-		
9	Owner_Person		-		
10	Owned_Number		-		

Notes:

1. Czech distinguishes masculine animate (Animate=yes above) and masculine inanimate (Animate=no) Gender. Masculine inanimate Nouns always have the same form in the nominative and accusative Case, whereas masculine animate Nouns have predominantly the same form in the genitive and accusative Case. Masculine animate Nouns and masculine inanimate Nouns differ in accusative singular and nominative plural only.
2. The dual Number manifests itself only in the instrumental Case of several Nouns denoting dual parts of the human body.
3. Czech distinguishes 7 cases, the locative Case being obligatorily prepositional. With most paradigms, the form of the vocative differs from that of the nominative in singular; in plural the form of the vocative is identical to that of the nominative for all the paradigms.
4. Verbal nouns are classified as Nouns.

1.2 Combinations

PoS	Type	Gend	Numb	Case	Anim	Examples
N	p	m	[sp]	any	y	Pavel, Pavlové
N	p	m	[sp]	any	n	Hradec, Hradce
N	p	f	[sp]	any	-	Lenka, Lenky
N	p	n	[sp]	any	-	Bradlo, Ústí
N	c	m	s	n	-	kluk, vor
N	c	m	s	g	-	kluka, voru
N	c	m	s	d	-	klukovi, voru
N	c	m	s	a	y	kluka
N	c	m	s	a	n	vor
N	c	m	s	v	-	kluku, vore!
N	c	m	s	l	-	klukovi, voru
N	c	m	s	i	-	klukem, vorem
N	c	m	p	n	y	kluci
N	c	m	p	n	n	vory
N	c	m	p	g	-	kluků vorů
N	c	m	p	d	-	klukům vorům

N	c	m	p	a	-	kluky	vory	
N	c	m	p	v	-	kluci!	vory!	
N	c	m	p	l	-	klucích	vorech	
N	c	m	p	i	-	kluky	vory	
N	c	[fn]	s	n	-	sova,	kolo	
N	c	[fn]	s	g	-	sovy,	kola	
N	c	[fn]	s	d	-	sově	kolu	
N	c	[fn]	s	a	-	sovu	kolo	
N	c	[fn]	s	v	-	sovo!	kolo!	
N	c	[fn]	s	l	-	sově	kole / kolu	
N	c	[fn]	s	i	-	sovou	kolem	
N	c	[fn]	p	n	-	sovy	kola	
N	c	[fn]	p	g	-	sov	kol	
N	c	[fn]	p	d	-	sovám	kolům	
N	c	[fn]	p	a	-	sovy	kola	
N	c	[fn]	p	v	-	sovy!	kola!	
N	c	[fn]	p	l	-	sovách	kolech	
N	c	[fn]	p	i	-	sovami	koly	
N	c	[fn]	d	i	-	rukama	očima	(dual number)

Note: In the Combinations above, 'any' is a variable standing for any admissible value.

7.2 Verb (V)

2.1 Lexicon

P	ATT		VAL	C	Example	Czech term
1	Type		main	m	dělat	významové sloveso
			auxiliary	a	mít	pomocné sloveso
			modal	o	muset	modální sloveso
			copula	c	být	spona (kopula)
2	VForm		indicative	i	dělám	indikativ
			imperative	m	dělej!	imperativ
			conditional	c	by	podmiňovací částice
			infinitive	n	dělat	infinitiv
			participle	p	dělal, dělán	příčestí
		l.s.	transgressive	t	dělaje, udělavši	přechodník
3	Tense		present	p	dělám	prézens
			future	f	budu, poběžím	futurum
			past	s	dělal	čas minulý
4	Person		first	1	dělám	první osoba
			second	2 děláš		druhá osoba

P	ATT		VAL	C	Example	Czech term
			third	3	dělá	třetí osoba
5	Number		singular	s	dělám	singulár
			plural	p	děláme	plurál
6	Gender		masculine	m	dělal	masculinum /rod mužský
			feminine	f	dělala	femininum /rod ženský
			neuter	n	dělalo	neutrum /rod střední
7	Voice		active	a	dělal	aktivum
			passive	p	dělán	pasívum
8	Negative		no	n	dělám	kladné sloveso
			yes	y	nedělám	záporné sloveso
9	Definiteness			-		
10	Clitic			-		
11	Case			-		
12	Animate	l.s.	no	n	dělaly	neživotné
		l.s.	yes	y	dělali	životné
13	Clitic_s	l.s.	no	n	udělal	tvar bez klit. -s
		l.s.	yes	y	udělals	tvar s klit. -s

Notes

1. The verb "být" (E. "to be") in all its functions is characterized as Type=c (i.e. the copula), which clearly is an oversimplification because the verb has more meanings (auxiliary etc.).
2. Auxiliary verbs (Type=a) include neither the verb "být" (see above), nor the modal verbs.
3. The 'past participle' in Czech is used for expressing compound active past Tense and is encoded as: Type=p(articiple), Tense=p(ast), Voice=a(ctive).
4. Passive participles are encoded as: Type=participle, Tense='-', Voice=passive. This encoding is used only for the passive participle in the predicative position, e.g. "byl chycen" (E. "(he) was caught"). The case marked passive participles, both in the predicative and in the attributive position, e.g. "padělaný rukopis" (E. "forged manuscript"), are classified as (qualificative) adjectives.
5. Adjectival active and passive participles, e.g. "stojící" (E. "standing") or "udělaný" (E. "performed" or "done", cf. Note 4 above) are classified as adjectives.
6. Negative verbs are marked as Negative=y, whereas non-negative verbs are marked as Negative=n.
7. The term transgressive roughly corresponds to the term 'verbal

participle'. The transgressives distinguish:
 Number (singular, plural),
 Gender (masculine, non-masculine)
 Tense (past, present)
The Gender opposition of masculine animate vs. masculine inanimate is neutralized in transgressives; thus, there is one masculine form and one non-masculine (the form of feminine and neuter is neutralized).

8. Gender and Animate values correspond to those associated with Nouns and are necessary to account properly for agreement.
9. Gender manifests itself in past participles, passive participles and transgressives only.
10. Normally, Verbs form the future Tense periphrastically by auxiliary "být" (E. "to be") plus infinitive of the main Verb. In addition to the copula, there are, however, some Verbs which form future Tense non-periphrastically, i.e. synthetically (Verbs of motion). Such verbal forms are marked as Tense=f.
11. The 'yes' value of the Clitic_s attribute denotes a verbal form having the clitic morpheme 's' appended as a suffix. This 's' morpheme expresses 2nd Person singular present Tense of the auxiliary Verb "být" (i.e. the form "jsi"). There is no intermediate hyphen between the verbal form and the 's' morpheme.
12. The Clitic_s attribute is specified for VForm=infinitive (VForm=n) and Vform=p(articiple) only.
13. Some modal and auxiliary Verbs do not form imperative and transgressive.
14. The voice value ('a' or 'p') is not specified for VForm=c(onditional) and VForm=t(ransgressive), in which case VForm='-'.

2.2 Combinations

PoS	Type	VFrm	Tens	Pers	Numb	Gend	Voic	Neg	Anim	Cl_s	Examples
V	m	n	-	-	-	-	[na]	[ny]	-	[ny]	prát, neprat
V	a	n	-	-	-	-	[na]	[ny]	-	[ny]	mít, nemít
V	o	n	-	-	-	-	[na]	[ny]	-	[ny]	muset, nemuset
V	c	n	-	-	-	-	[na]	[ny]	-	[ny]	být, nebýt
V	c	c	-	3	s	-	-	-	-	-	by
V	c	c	-	[12]	s	-	-	-	-	-	bych, bys
V	c	c	-	[12]	p	-	-	-	-	-	bychom, byste
V	c	i	f	[123]	s	-	a	n	-	-	budu, budeš, bude
V	c	i	f	[123]	s	-	a	y	-	-	nebudu, nebudeš, nebude
V	c	i	f	[123]	p	-	a	n	-	-	budeme, budete, budou
V	c	i	f	[123]	p	-	a	y	-	-	nebudeme, nebudete, nebudou
V	m	i	f	[123]	s	-	a	n	-	-	poletím, poletíš, poletí
V	m	i	f	[123]	s	-	a	y	-	-	nepoletím, nepoletíš, nepoletí
V	m	i	f	[123]	p	-	a	n	-	-	poletíme, poletíte, poletí

V	m	i	f	[123]	p	-	a	y	-	-	nepoletíme, nepoletíte, nepoletí
V	c	i	p	[123]	s	-	a	n	-	-	jsem, jsi, je
V	c	i	p	[123]	s	-	a	y	-	-	nejsem, nejsi, není
V	c	i	p	[123]	p	-	a	n	-	-	jsme, jste, jsou
V	c	i	p	[123]	p	-	a	y	-	-	nejsme, nejste, nejsou
V	m	i	p	[123]	s	-	a	n	-	-	třu, třeš, tře
V	m	i	p	[123]	s	-	a	y	-	-	netřu, netřeš, netře
V	m	i	p	[123]	p	-	a	n	-	-	třeme, třete, třou
V	m	i	p	[123]	p	-	a	y	-	-	netřeme, netřete, netřou
V	a	i	p	[123]	s	-	a	n	-	-	mám, máš, má
V	a	i	p	[123]	s	-	a	y	-	-	nemám, nemáš, nemá
V	a	i	p	[123]	p	-	a	n	-	-	máme, máte, mají
V	a	i	p	[123]	p	-	a	y	-	-	nemáme, nemáte, nemají
V	o	i	p	[123]	s	-	a	n	-	-	musím, musíš, musí
V	o	i	p	[123]	s	-	a	y	-	-	nemusím, nemusíš, nemusí
V	o	i	p	[123]	p	-	a	n	-	-	musíme, musíte, musejí/musí
V	o	i	p	[123]	p	-	a	y	-	-	nemusíme, nemusíte, nemusejí
V	c	m	p	1	p	-	a	[ny]	-	-	buďme!, nebuďme!
V	c	m	p	2	[sp]	-	a	n	-	-	buď!, buďte!
V	c	m	p	2	[sp]	-	a	y	-	-	nebuď!, nebuďte!
V	m	m	p	1	p	-	a	[ny]	-	-	pracujme!, nepracujme!
V	m	m	p	2	[sp]	-	a	n	-	-	pracuj!, pracujte!
V	m	m	p	2	[sp]	-	a	y	-	-	nepracuj!, nepracujte!
V	c	p	s	-	s	[mfn]	a	n	-	n	byl, byla, bylo
V	c	p	s	-	s	[mfn]	a	y	-	n	nebyl, nebyla, nebylo
V	c	p	s	-	s	[mfn]	a	n	-	y	byls, bylas, bylos
V	c	p	s	-	s	[mfn]	a	y	-	y	nebyls, nebylas, nebylos
V	c	p	s	-	p	m	a	n	[yn]	n	byli, byly
V	c	p	s	-	p	m	a	y	[yn]	n	nebyli, nebyly
V	c	p	s	-	p	[fn]	a	n	-	n	byly, byla
V	c	p	s	-	p	[fn]	a	y	-	n	nebyly, nebyla
V	a	p	s	-	s	[mfn]	a	n	-	n	měl, měla, mělo
V	a	p	s	-	s	[mfn]	a	y	-	n	neměl, neměla, nemělo
V	a	p	s	-	s	[mfn]	a	n	-	y	měls, mělas, mělos
V	a	p	s	-	s	[mfn]	a	y	-	y	neměls, nemělas, nemělos
V	a	p	s	-	p	m	a	n	[yn]	n	měli, měly
V	a	p	s	-	p	m	a	y	[yn]	n	neměli, neměly
V	a	p	s	-	p	[fn]	a	n	-	n	měly, měla
V	a	p	s	-	p	[fn]	a	y	-	n	neměly, neměla
V	o	p	s	-	s	[mfn]	a	n	-	n	musel, musela, muselo
V	o	p	s	-	s	[mfn]	a	y	-	n	nemusel, nemusela, nemuselo
V	o	p	s	-	s	[mfn]	a	n	-	y	musels, muselas, muselos
V	o	p	s	-	s	[mfn]	a	y	-	y	nemusels, nemuselas, nemuselos

V	o	p	s	-	p	m	a	n	[yn]	n	museli, musely
V	o	p	s	-	p	m	a	y	[yn]	n	nemuseli, nemusely
V	o	p	s	-	p	[fn]	a	n	-	n	musely, musela
V	o	p	s	-	p	[fn]	a	y	-	n	nemusely, nemusela
V	m	p	s	-	s	[mfn]	a	n	-	n	dělal, dělala, dělalo
V	m	p	s	-	s	[mfn]	a	y	-	n	nedělal, nedělala, nedělalo
V	m	p	s	-	s	[mfn]	a	n	-	y	dělals, dělalas, dělalos
V	m	p	s	-	s	[mfn]	a	y	-	y	nedělals, nedělalas, nedělalos
V	m	p	s	-	p	m	a	n	[yn]	n	dělali, dělaly
V	m	p	s	-	p	m	a	y	[yn]	n	nedělali, nedělaly
V	m	p	s	-	p	[fn]	a	n	-	n	dělaly, dělala
V	m	p	s	-	p	[fn]	a	y	-	n	nedělaly, nedělala
V	m	p	-	-	s	[mfn]	p	n	-	n	udělán, udělána uděláno
V	m	p	-	-	s	[mfn]	p	y	-	n	neudělán, neudělána neuděláno
V	m	p	-	-	p	m	p	n	[yn]	n	uděláni, udělány
V	m	p	-	-	p	m	p	y	[yn]	n	neuděláni, neudělány
V	m	p	-	-	p	[fn]	p	n	-	n	udělány, udělána
V	m	p	-	-	p	[fn]	p	y	-	n	neudělány, neudělána
V	c	t	p	-	s	m	-	[ny]	-	-	jsa, nejsa
V	c	t	p	-	s	[fn]	-	[ny]	-	-	jsouc, nejsouc
V	c	t	p	-	p	-	-	[ny]	-	-	jsouce, nejsouce
V	m	t	p	-	s	m	-	[ny]	-	-	dělaje, nedělaje
V	m	t	p	-	s	[fn]	-	[ny]	-	-	dělajíc, nedělajíc
V	m	t	p	-	p	-	-	[ny]	-	-	dělajíce nedělajíce
V	c	t	s	-	s	m	-	[ny]	-	-	byv, nebyv
V	c	t	s	-	s	[fn]	-	[ny]	-	-	byvši, nebyvši
V	c	t	s	-	p	-	-	[ny]	-	-	byvše, nebyvše
V	m	t	s	-	s	m	-	[ny]	-	-	udělav, neudělav
V	m	t	s	-	s	[fn]	-	[ny]	-	-	udělavši, neudělavší
V	m	t	s	-	p	-	-	[ny]	-	-	udělavše, neudělavše

7.3 Adjective (A)

3.1 Lexicon

P	ATT	VAL	C	Example	Czech term
1	Type	qualificative	f	dobrý	kvalitativní adjektivum
		possessive	s	matčin	posesívní adjektivum
2	Degree	positive	p	dobrý	pozitiv / 1. stupeň
		comparative	c	lepší	komparativ / 2. stupeň
		superlative	s	nejlepší	superlativ / 3. stupeň
3	Gender	masculine	m	dobrý	masculinum / rod mužský
		feminine	f	dobrá	femininum / rod ženský
		neuter	n	dobré	neutrum / rod střední
4	Number	singular	s	dobrý	singulár
		plural	p	dobří	plurál
		dual	d	dobrýma	duál
5	Case	nominative	n	dobrý	nominativ
		genitive	g	dobrého	genitiv
		dative	d	dobrému	dativ
		accusative	a	dobrého	akuzativ
		vocative	v	dobrý!	vokativ
		locative	l	dobrém	lokál
		instrumental	i	dobrým	instrumentál
6	Definiteness		-		
7	Clitic		-		
8	Animate	no	n	dobré	neživotné
		yes	y	dobří	životné
9	Formation l.s.	nominal	n	stár	jmenný tvar
	l.s.	compound	c	starý	složený tvar
10	Owner_Number		-		
11	Owner_Person		-		
12	Owned_Number		-		

Notes

1. Three deverbative adjectival participles, i.e. past active participle, passive participle and present active participle are not distinguished. They are conflated in the 'qualificative' value of the Type attribute (Type=f).
2. Only qualificative (and passive participle) Adjectives can be specified for Degree and for nominal (short) Form.
3. The attributes Gender, Number, Case and Animate correspond to the same categories within the Nouns. They are necessary for the proper account of agreement of Adjectives with Nouns.
4. The Formation attribute distinguishes a nominal (short) form from a so-called compound (long) form of an Adjective. The nominal form can be used in the predicative function only. It is specified for nominative and accusative Case only.
5. The Adjectives which have no degrees of comparison have the

Degree value equal to p(ositive).

3.2 Combinations

PoS	Type	Degr	Gend	Numb	Case	Anim	Form	Examples
A	s	-	m	s	n	-	-	otcův
A	s	-	m	s	g	-	-	otcova
A	s	-	m	s	d	-	-	otcovu
A	s	-	m	s	a	y	-	otcova
A	s	-	m	s	a	n	-	otcův
A	s	-	m	s	v	-	-	otcův!
A	s	-	m	s	l	-	-	otcově / otcovu
A	s	-	m	s	i	-	-	otcovým
A	s	-	m	p	n	y	-	otcovi
A	s	-	m	p	n	n	-	otcovy
A	s	-	m	p	g	-	-	otcových
A	s	-	m	p	d	-	-	otcovým
A	s	-	m	p	a	-	-	otcovy
A	s	-	m	p	v	y	-	otcovi!
A	s	-	m	p	v	n	-	otcovy!
A	s	-	m	p	l	-	-	otcových
A	s	-	m	p	i	-	-	otcovými
A	s	-	[fn]	s	n	-	-	otcova, otcovo
A	s	-	[fn]	s	g	-	-	otcovy, otcova
A	s	-	[fn]	s	d	-	-	otcově, otcovu
A	s	-	[fn]	s	a	-	-	otcovu, otcovo
A	s	-	[fn]	s	v	-	-	otcova!, otcovo
A	s	-	[fn]	s	l	-	-	otcově, otcově / otcovu
A	s	-	[fn]	s	i	-	-	otcovou, otcovým
A	s	-	[fn]	p	n	-	-	otcovy, otcova
A	s	-	[fn]	p	g	-	-	otcových
A	s	-	[fn]	p	d	-	-	otcovým
A	s	-	[fn]	p	a	-	-	otcovy, otcova
A	s	-	[fn]	p	v	-	-	otcovy! otcova!
A	s	-	[fn]	p	l	-	-	otcových
A	s	-	[fn]	p	i	-	-	otcovými
A	s	-	[fn]	d	i	-	-	otcovýma
A	f	[pcs]	m	s	n	-	c	dobrý
A	f	[pcs]	m	s	g	-	c	dobrého
A	f	[pcs]	m	s	d	-	c	dobrému
A	f	[pcs]	m	s	a	y	c	dobrého
A	f	[pcs]	m	s	a	n	c	dobrý
A	f	[pcs]	m	s	v	-	c	dobrý!
A	f	[pcs]	m	s	l	-	c	dobrém
A	f	[pcs]	m	s	i	-	c	dobrým
A	f	[pcs]	m	p	n	y	c	dobří
A	f	[pcs]	m	p	n	n	c	dobré
A	f	[pcs]	m	p	g	-	c	dobrých
A	f	[pcs]	m	p	d	-	c	dobrým
A	f	[pcs]	m	p	a	-	c	dobré
A	f	[pcs]	m	p	v	y	c	dobří

PoS	Type	Degr	Gend	Numb	Case	Anim	Form	Examples
A	f	[pcs]	m	p	v	n	c	dobré
A	f	[pcs]	m	p	l	-	c	dobrých
A	f	[pcs]	m	p	i	-	c	dobrými
A	f	[pcs]	[fn]	s	n	-	c	dobrá, dobré
A	f	[pcs]	[fn]	s	g	-	c	dobré, dobrého
A	f	[pcs]	[fn]	s	d	-	c	dobré, dobrému
A	f	[pcs]	[fn]	s	a	-	c	dobrou, dobré
A	f	[pcs]	[fn]	s	v	-	c	dobrá!, dobré
A	f	[pcs]	[fn]	s	l	-	c	dobré, dobrém
A	f	[pcs]	[fn]	s	i	-	c	dobrou, dobrým
A	f	[pcs]	[fn]	p	n	-	c	dobré, dobrá
A	f	[pcs]	[fn]	p	g	-	c	dobrých
A	f	[pcs]	[fn]	p	d	-	c	dobrým
A	f	[pcs]	[fn]	p	a	-	c	dobré, dobrá
A	f	[pcs]	[fn]	p	v	-	c	dobré, dobrá
A	f	[pcs]	[fn]	p	l	-	c	dobrých
A	f	[pcs]	[fn]	p	i	-	c	dobrými
A	f	[pcs]	[fn]	d	i	-	c	dobrýma
A	f	-	[mfn]	s	n	-	n	stár, stára, stáro
A	f	-	[mfn]	s	a	-	n	stára, stáru, stáro
A	f	-	m	p	n	[ny]	n	stáři, stáry
A	f	-	[fn]	p	n	-	n	stáry, stára
A	f	-	[mfn]	p	a	-	n	stáry, stáry, stára

7.4 Pronoun (P)

4.1 Lexicon

P	ATT	VAL	C	Example	Czech term
1	Type	personal	p	já	osobní
		demonstrative	d	ten	ukazovací
		indefinite	i	někdo	neurčité
		possessive	s	její	posesívní
		interrogative	q	kdo	tázací
		relative	r	jenž	vztažné / relativní
		reflexive	x	se	zvratné / reflexívní
		negative	z	nikdo	záporná / negativní
		general	g	každý	totální
2	Person	first	1	já	první osoba
		second	2	ty	druhá osoba
		third	3	on	třetí osoba
3	Gender	masculine	m	on	masculinum
		feminine	f	ona	femininum

	neuter	n	to	neutrum
4 Number	singular	s	ty	singulár
	plural	p	oni	plurál
	dual	d	těma	duál
5 Case	nominative	n	ty	nominativ
	genitive	g	tebe	genitiv
	dative	d	tobě,ti	dativ
	accusative	a	tebe, tě	akuzativ
	locative	l	tobě	lokál
	instrumental	i	tebou	instrumentál
6 Owner_Number	singular	s	můj	singulár
	plural	p	jejich	plurál
7 Owner_Gender	masculine	m	jehož	masculinum
	feminine	f	jejíhož	femininum
	neuter	n	jehož	neutrum
8 Clitic	no	n	tobě	nepříklonné
	yes	y	ti	příklonka
9 Referent_Type	personal	p	se, sebe, si	osobní zvratné
	possessive	s	svůj	zvratné posesívní
10Syntactic_Type	nominal	n	on	syntaktické substantivum
	adjectival	a	který	syntaktické adjektivum
11Definiteness		-		
12Animate	no	n	který	neživotné
	yes	y	kteří, kterého	životné
13Clitic_s l.s.	yes	y	tys,ses	zájmeno s klitickým -s
l.s.	no	n	ty	zájmeno bez klitic. -s
14Pronoun_Form		-		
15Owner_Person		-		
16Owned_Number		-		

Notes

1. Gender, Number, Case and Animate correspond to the same categories as specified for Nouns. They are necessary for the proper account of agreement of adjectival Pronouns with Nouns.
2. Type=reflexive ecompasses all reflexive pronouns (‘‘se’’, ‘‘sebe’’, ‘‘si’’, ‘‘svůj’’) as well as "se" in its role as the obligatory particle of reflexive verbs. Personal and possessive reflexives are further distinguished via the Referent_Type attribute. "se" in all its roles will be marked as the reflexive personal clitic pronoun.
3. Pronouns are distinguished between having a (syntactically) nominal and (syntactically) adjectival function. All pronominal types except the demonstrative and possessive one can be nominal, and all except for the personal one can be adjectival.
5. Referent_Type is used to distinguish personal reflexives (which include "se" in all its functions) from the possesive reflexives ("svůj").
6. Negative and general Pronouns ("general" Pronouns concern the Pronouns like "všichni" [E. "all"], "každý" [E. "every"] etc.) are important from the viewpoint of their syntactic distribution.
7. The Clitic attribute distinguishes clitical vs. nonclitical pronominal forms, e.g. "ti" vs. "tobě".
8. The ’yes’ value of the Clitic_s attribute denotes a pronominal form having the clitic morpheme ’s’ appended as a suffix. This morpheme expresses 2nd Person singular present Tense of the auxiliary Verb "být" (E. "to be"). There is no intermediate hyphen between the Pronoun and the ’s’ morpheme.
9. Owner_Number and Owner_Gender concern the possessor’s Number and Gender, respectively.

4.2 Combinations

PoS	Type	Pers	Gend	Numb	Case	Ow_N	Ow_G	Clit	Ref	Syn	Anim	Cl_s	Examples
P	x	-	-	-	[ga]	-	-	y	p	n	-	n	se
P	x	-	-	-	[ga]	-	-	y	p	n	-	y	ses
P	x	-	-	-	[ga]	-	-	n	p	n			sebe
P	x	-	-	-	d	-	-	y	p	n	-	n	si
P	x	-	-	-	d	-	-	y	p	n	-	y	sis
P	x	-	-	-	[dl]	-	-	n	p	n	-	[ny]	sobě
P	x	-	-	-	i	-	-	n	p	n	-	[ny]	sebou
P	x	-	[mfn]	all	any	-	-	n	s	a	[ny-]	n	svůj
P	p	1	-	[sp]	all	-	-	[ny]	-	n	-	[ny]	já, my
P	p	2	-	[sp]	all	-	-	[ny]	-	n	-	n	ty, vy
P	p	2	-	s	n	-	-	n	-	n	-	y	tys
P	p	3	[mfn]	[sp]	all	-	-	[ny]	-	n	-	[ny]	on, oni, ony, ona
P	s	1	[mfn]	all	all	s	-	n	-	a	[ny-]	[ny]	můj
P	s	2	[mfn]	all	[na]	s	-	n	-	a	[ny-]	[ny]	tvůj
P	s	3	-	-	-	s	[mn]	n	-	a	-	[ny]	jeho
P	s	3	[mfn]	all	all	s	f	n	-	a	-	[ny]	její
P	s	3	-	-	-	p	[mfn]	n	-	a	-	-	jejich
P	d	-	[mfn]	all	all	-	-	n	-	a	[ny-]	[ny]	1)
P	i	-	[mn]	s	all	-	-	n	-	n	-	-	2)
P	i	-	[mfn]	[sp]	all	-	-	n	-	a	[ny-]	-	3)
P	[qr]	-	[mn]	s	all	-	-	n	-	n	-	-	4)

P	[qr]	-	[mfn]	[sp]	all	-	-	n	-	a	[ny-]	-	5)
P	z	-	[mn]	s	all	-	-	n	-	n	-	-	6)
P	z	-	[mfn]	[sp]	all	-	-	n	-	a	[ny-]	-	7)
P	g	-	[mfn]	[sp]	all	-	-	n	-	n	[ny-]	-	8)

1) ten, tento, tamten, tenhle, tenhleten, takový, onaký
2) někdo, nějaký, kdovíkdo, leckdo, leccos, něco
3) jaký, který, kdovíjaký, lecjaký
4) kdo, co
5) jaký, který, jenž, což
6) nikdo, nic
7) žádný, nijaký
8) všechen, každý

7.5 Determiner (D)

Not applicable.

7.6 Article (T)

Not applicable.

7.7 Adverb (R)

7.1 Lexicon

P	ATT	VAL	C	Example	Czech term
1	Type	general	g	dobře	příslovce
2	Degree	positive	p	málo	pozitiv / 1. stupeň
		comparative	c	méně	komparativ / 2. stupeň
		superlative	s	nejméně	superlativ / 3. stupeň
3	Clitic		-		
4	Number		-		
5	Person		-		

Notes

1. The classification given above is considerably simplified as compared to traditional Czech grammars. There can be other classifications as well, eg.:
   (a) syntactic: Adverb modifying a Verb
   Adverb modifying an Adjective
   Adverb modifying another Adverb
   Adverb modifying a Noun from the left
   Adverb modifying a Noun from the right
   (b) semantic temporal
   spatial
   qualitative
   ...
   We refrained from this typology here.
2. Particles form a separate part of speech category (see below) as is customary in Czech grammars.
3. The Adjectives which have no degrees of comparison have the Degree value equal to p(ositive) similarly as Adjectives.

7.2 Combinations

Pos	Type	Deg	Examples
R	g	p	dobře
R	g	c	lépe
R	g	s	nejlépe
R	g	p	tady

7.8 Adposition (S)

8.1 Lexicon

P	ATT	VAL	C	Example	Czech term
1	Type	preposition	p	nad	předložka
2	Formation	simple	s	na, v	predložka (pravá)
		compound	c	naň, oč	kontrakce předl. + zájm.

3 Case (req.by prep.)	genitive	g	bez	genitiv
	dative	d	proti	dativ
	accusative	a	pro	akuzativ
	locative	l	v	lokál
	instrumental	i	s	instrumentál
4 Clitic		-		

Notes

1. Czech has only Prepositions, no postpositions.
2. For the disambiguation of word forms belonging to declension parts of speech it seems necessary to include the information about the case which each Preposition requires.
3. A preposition can be contracted with a pronoun; such a preposition has Formation=c(ompound).

8.2 Combinations

PoS	Type	Form	Case	Examples
S	p	s	g	bez, kromě
S	p	s	d	k, proti
S	p	s	a	pro, mimo
S	p	s	l	o, v, při
S	p	s	i	s, pod
S	p	c	-	naň, zač

7.9 Conjunction (C)

9.1 Lexicon

P ATT	VAL	C	Example	Czech term
1 Type	coordinating	c	a, ani	spojka souřadicí
	subordinating	s	aby, protože	spojka podřadicí
2 Formation		-		
3 Coord_Type		-		
4 Sub_Type		-		

5 Clitic		-		
6 Number	singular	s	kdybych	spojka 'kdyby'+sg. od 'by'
	plural	p	kdybyste	spojka 'kdyby'+pl. od 'by'
7 Person	first	1	abych	spojka 'aby'+1.os. od 'by'
	second	2	abyste	spojka 'aby'+2.os. od 'by'
	third	3	aby	spojka 'aby'+3.os. od 'by'

Notes

1. Conjunctions "abych", "abys", ..., "kdybych", ... are composed of the Conjunction "aby" or "kdyby" and the conditional particle ‘‘by’’ ("bych", "bys", "by", "bychom", "byste"). These Conjunctions are therefore specified for Person and Number for the sake of agreement relation.
2. The class of two-part Conjunctions has not been introduced.

9.2 Combinations

PoS	Type	Numb	Pers	Examples
C	c	-	-	a, i, ba, neboť, ani
C	s	-	-	že, protože, zda
C	s	-	3	aby, kdyby
C	s	s	[12]	abych, abys, kdybych, kdybys
C	s	p	[12]	abychom, abyste, kdybychom, kdybyste

7.10 Numeral (M)

10.1 Lexicon

P ATT	VAL	C	Example	Czech term
1 Type	cardinal	c	dva	číslovka základní
	ordinal	o	pátý	číslovka řadová
	multiple	m	dvakrát	číslovka násobná
	special	s	dvojí	číslovka druhová
2 Gender	masculine	m	dva	masculinum
	feminine	f	dvě	femininum
	neuter	n	dvě	neutrum

P	ATT	VAL	C	Example	Czech term
3	Number	singular	s	druhý	singulár
		plural	p	druzí	plurál
		dual	d	druhýma	duál
4	Case	nominative	n	dva, dvě	nominativ
		genitive	g	dvou	genitiv
		dative	d	dvěma	dativ
		accusative	a	dva, dvě	akuzativ
		locative	l	dvou	lokál
		instrumental	i	dvěma	instrumentál
5	Form	digit	d	5	číslo (arabské)
		roman	r	MCMVIII	číslo (římské)
		letter	l	šedesát	číslovka slovem
6	Definiteness		-		
7	Clitic		-		
8	Class	definite1	1	jeden	
		definite2	2	dva	
		definite34	3	tři	
		definite	f	pět	
		demonstrative	d	tolik	
		indefinite	i	několik	
		interrogative	q	kolik	
		relative	r	kolik	
9	Animate	no	n	páté	neživotné
		yes	y	pátí	životné
10	Owner_Number		-		
11	Owner_Person		-		
12	Owned_Number		-		

Notes

1. Numerals have been specified as a separate category because of their specific syntactic distribution. We have specified two syntactic classifications by means of the attributes Type and Class; they concern different syntactic distributions. For instance "několik" (E. "several") will be characterized as:
   Type: cardinal
   Class: indefinite
2. Among the definite numbers there are four subclasses (definite1, definite2, definite34, definite) which differ in their syntactic distribution and contain the following Numerals: {1}, {2}, {3,4}, {5,6,...}
3. Gender, Number and Case correspond to the same categories as specified for Nouns. They are necessary for the proper account of agreement of Numerals with Nouns.
4. In direct cases (nominative, accusative) the cardinal numerals belonging to the class with one of the values {fdiqr} (see above) behave like neuter Nouns in singular, whereas in oblique cases they behave like adjectival attributes in plural.

10.2 Combinations

PoS	Type	Gend	Numb	Case	Form	Class	Anim	Examples
M	-	-	-	-	d	[123f]	-	56
M	-	-	-	-	r	[123f]	-	MVIII
M	c	[mfn]	s	any	l	1	-	jeden, jedna, jedno
M	c	[mfn]	p	any	l	2	-	dva, dvě
M	c	-	p	any	l	3	-	tři, čtyři
M	c	n	[sp]	any	l	f	-	pět, deset, padesát
M	c	n	[sp]	any	l	[diqr]	-	tolik, několik, kolik
M	o	[mfn]	[spd]	any	l	any	[ny-]	první, druhý, několikátý
M	m	-	-	-	l	any	-	dvakrát, pětkrát, několikrát
M	s	[mfn]	[spd]	n	l	any	[ny-]	dvojí, troje, paterý

Note: In the Combinations above, 'any' is a variable standing for any admissible value.

7.11 Interjection (I)

P	ATT	VAL	C	Example	Czech term
1	Type		-	au!, och!	citoslovce
2	Formation		-		

7.12 Residual (X)

P	ATT	VAL	C	Example	Czech term
			-	sic, a+b	Zbývající elementy

7.13 Abbreviation (Y)

P	ATT	VAL	C	Example	Czech term
1	Syntactic_Type		-	atd.	zkratka
2	Gender		-		
3	Number		-		
4	Case		-		
5	Definiteness		-		

7.14 Particle (Q)

P	ATT	VAL	C	Example	Czech term
1	Type		-	ano, ne	partikule / částice
2	Formation		-		
3	Clitic		-		

Chapter 8

Application to Bulgarian

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8.1 Noun (N)

P	ATT	VAL	Example	C
1	Type	common	kniga	c
		proper	Ivan	p
2	Gender	masculine	stol	m
		feminine	masa	f
		neuter	vreteno	n
3	Number	singular	momtche	s
		plural	stolove	p
	l.s.	count	(dva) stola	t
4	Case	nominative	narod	n
		vocative	narode	v
5	Definiteness	no	utchitel	n
		yes	zhenata	y
	l.s.	short_art	moliva	s
	l.s.	full_art	molivyt	f
6	Clitic		-	-
7	Animate		-	-
8	Owner_Number		-	-
9	Owner_Person		-	-

10Owned_Number		-	-

Combinations

POS	Type	Gend	Numb	Case	Def	Clit	Anim	OwnN	OwnP	OwdN	Example
N	[cp]	[mfn]	[sp]	-	n	-	-	-	-	-	1.
N	[cp]	m	s	-	[sf]	-	-	-	-	-	2.
N	[cp]	[mf]	-	v	-	-	-	-	-	-	3.
N	[cp]	[mfn]	p	-	y	-	-	-	-	-	4.
N	[cp]	[fn]	s	-	y	-	-	-	-	-	5.
N	c	m	t	-	-	-	-	-	-	-	6.

Examples:
1. narod, zhena, selo, Ivan, Penka
2. naroda, narodyt
3. narode, zheno
4. narodite, zhenite, selata
5. zhenata, seloto
6. naroda

8.2 Verb (V)

P ATT		VAL	Example	C
1 Type		main	govorya	m
		auxiliary	sym	a
2 VForm		indicative	govorya	i
		imperative	govorete	m
		participle	govoril	p
		gerund	govorejki	g
3 Tense		present	govorya	p
		imperfect	govoreh	i
		past	govoreno	s
	l.s.	aorist	govorih	a
4 Person		first	govorya	1
		second	govorish	2
		third	govori	3
5 Number		singular	govorya	s
		plural	govoryat	p
6 Gender		masculine	govoril	m
		feminine	govorila	f
		neuter	govorilo	n
7 Voice		active	govorest	a
		passive	govoreno	p
8 Negative				-
9 Definiteness		no	govoril	n
		yes	govorilite	y
		short_art	govoriliya	s
		full_art	govoriliyat	f
10Clitic				-
11Case				-
12Animate				-
13Clitic_s				-

Combinations

PoS	Type	VFrm	Tens	Pers	Numb	Gend	Voic	Neg	Def	Cl1	Case	An	Cl2	Example
V	[ma]	i	[pai]	[123]	[sp]	-	-	-	-	-	-	-	-	1.
V	[ma]	m	-	2	[sp]	-	-	-	-	-	-	-	-	2.
V	m	p	[pai]	-	s	[mfn]	a	-	n	-	-	-	-	3.
V	m	p	[pa]	-	s	m	a	-	[sf]	-	-	-	-	4.
V	m	p	[pa]	-	s	[fn]	a	-	y	-	-	-	-	5.
V	m	p	[pai]	-	p	-	a	-	n	-	-	-	-	6.
V	m	p	[pa]	-	p	-	a	-	y	-	-	-	-	7.
V	m	p	s	-	s	[mfn]	p	-	n	-	-	-	-	8.
V	m	p	s	-	s	m	p	-	[sf]	-	-	-	-	9.
V	m	p	s	-	s	[fn]	p	-	y	-	-	-	-	10.
V	m	p	s	-	p	-	p	-	[ny]	-	-	-	-	11.
V	a	p	[ai]	-	s	[mfn]	a	-	n	-	-	-	-	12.
V	a	p	[a]	-	s	m	a	-	[sf]	-	-	-	-	13.
V	a	p	[a]	-	s	[fn]	a	-	y	-	-	-	-	14.
V	a	p	[ai]	-	p	-	a	-	n	-	-	-	-	15.
V	a	p	[a]	-	p	-	a	-	y	-	-	-	-	16.
V	[ma]	g	-	-	-	-	-	-	-	-	-	-	-	17.

Examples:
1. govorya, sym
2. govori, bydete

3. govorest, govorila
4. govorestiya, govorestiyat
5. govorestta, govoriloto
6. govoresti, govoreli
7. govoresti, govorilite
8. govoren, govorena
9. govoreniya, govoreniyat
10. govorenata, govorenoto
11. govoreni, govorenite
12. bil, bila
13. biliya, biliyat
14. bilata, biloto
15. bili
16. bilite
17. govorejki, bidejki

8.3 Adjective (A)

P	ATT	VAL	Example	CC
1	Type		-	-
2	Degree		-	-
3	Gender	masculine	bedniyat	m
		feminine	bedna	f
		neuter	bednoto	n
4	Number	singular	bedniya	s
		plural	bednite	p
5	Case			-
6	Definiteness	no	bedna	n
		yes	bednata	y
	l.s.	short_art	bedniya	s
	l.s.	full_art	bedniyat	f
7	Clitic			-
8	Animate			-
9	Formation			-
10	Owner_Number			-
11	Owner_Person			-
12	Owned_Number			-

Combinations

PoS	Type	Degr	Gend	Numb	Case	Def	Clit	An	Frm	OnN	OnP	OdN	Example
A	-	-	[mfn]	s	-	n	-	-	-	-	-	-	beden, bedna
A	-	-	m	s	-	[sf]	-	-	-	-	-	-	bedniya, bedniyat
A	-	-	[fn]	s	-	y	-	-	-	-	-	-	bednata, bednoto
A	-	-	-	p	-	[ny]	-	-	-	-	-	-	bedni, bednite

8.4 Pronoun (P)

P	ATT	VAL	Example	C
1	Type	personal	az	p
		demonstrative	tozi	d
		indefinite	nyakoj	i
		possessive	moj	s
		interrogative	koi	q
		relative	kojto	r
		reflexive	sebe	x
		negative	nikoj	z
		general	vseki	g
2	Person	first	az	1
		second	ti	2
		third	toj	3
3	Gender	masculine	moj	m
		feminine	moya	f
		neuter	moe	n
4	Number	singular	az	s
		plural	nie	p
5	Case	nominative	toj	n
		dative	nemu	d
		accusative	nego	a
6	Owner_Number			-
7	Owner_Gender			-
8	Clitic	no	sebe_si	n
		yes	mi	y

9 Referent_Type	personal	koj	p
	possessive	tchij	s
	attributive	kakva	a
	quantitative	kolko	q
10Syntactic_Type			-
11Definiteness	no	svoj	n
	yes	svoyata	y
	short_art	svoya	s
	full_art	svoyat	f
12Animate			-
13Clitic_s			-
14Pronoun_Form			-
15Owner_Person			-
16Owned_Number			-

Combinations

Personal pronouns

PoS	Type	Pers	Gnd	Nmb	Case	OnN	OnG	Clt	RefT	SynT	Def	Example
P	p	[12]	-	s	n	-	-	-	-	-	-	1.
P	p	3	[mfn]	s	n	-	-	-	-	-	-	2.
P	p	[123]	-	p	n	-	-	-	-	-	-	3.
P	p	[12]	-	s	[ad]	-	-	[yn]	-	-	-	4.
P	p	3	[mnf]	s	[ad]	-	-	[yn]	-	-	-	5.
P	p	[123]	-	p	[ad]	-	-	[yn]	-	-	-	6.

Examples:
1. az, ti
2. toj, tya, to
3. nie, vie, te
4. mene, me, mi, mene_me
5. nego, go, nego_go
6. nas, ni, nas_ni, nam

Demonstrative pronouns

PoS	Type	Pers	Gnd	Nmb	Case	OnN	OnG	Clt	RefT	SynT	Def	Example
P	d	-	[mfn]	s	-	-	-	-	p	-	-	tozi,tova
P	d	-	-	p	-	-	-	-	p	-	-	tezi
P	d	-	-	-	-	-	-	-	q	-	-	tolkova

Indefinite, Interrogative, Relative, Negative pronouns

PoS	Type	Pers	Gnd	Nmb	Case	OnN	OnG	Clt	RefT	SynT	Def	Example
P	[iqrz]	-	m	s	[nad]	-	-	-	p	-	-	1.
P	[iqrz]	-	m	s	-	-	-	-	[as]	-	-	2.
P	[iqrz]	-	[fn]	s	-	-	-	-	[pas]	-	-	3.
P	[iqrz]	-	-	p	-	-	-	-	[pas]	-	-	4.
P	[iqrz]	-	-	-	-	-	-	-	q	-	-	5.

Examples:
1. nyakoj, nyakogo, nyakomu, nikoj
2. nyakakyv, netchij, nikakyv
3. nyakoya, nyakakva, nechiya
4. nyakoi, nyakavi, netchii
5. nyakolko, nikolko, kolko

Possessive pronouns

PoS	Type	Pers	Gnd	Nmb	Case	OnN	OnG	Clt	RefT	SynT	Def	Example
P	s	[123]	m	s	-	-	-	n	-	-	[nsf]	1.
P	s	[123]	[fn]	s	-	-	-	n	-	-	[ny]	2.
P	s	[123]	-	p	-	-	-	n	-	-	[ny]	3.
P	s	[123]	-	[sp]	-	-	-	y	-	-	-	4.

Examples:
1. moj, moya, moyat
2. moya, moyata, tvoya
3. moi, moite, tvoi
4. mi, ti, mu, j, ni, vi, im

Reflexive pronouns

PoS	Type	Pers	Gnd	Nmb	Case	OnN	OnG	Clt	RefT	SynT	Def	Example
P	x	-	-	-	[ad]	-	-	[ny]	p	-	-	1.
P	x	-	m	s	-	-	-	n	s	-	[nsf]	2.
P	x	-	[fn]	s	-	-	-	n	s	-	[ny]	3.
P	x	-	-	p	-	-	-	n	s	-	[ny]	4.
P	x	-	-	-	-	-	-	y	s	-	-	5.

Examples:
1. sebe, se, si, sebe_si
2. svoj, svoyat, svoya
3. svoya, svoyata
4. svoi, svoite

5. si

General pronouns

PoS	Type	Pers	Gnd	Nmb	Case	OnN	OnG	Clt	RefT	SynT	Def	Example
P	g	-	m	s	[nad]	-	-	-	p	-	-	1.
P	g	-	m	s	-	-	-	-	a	-	-	2.
P	g	-	[fn]	s	-	-	-	-	[pa]	-	-	3.
P	g	-	-	p	-	-	-	-	[pa]	-	-	4.
P	g	-	m	s	-	-	-	-	q	-	[sf]	5.
P	g	-	[fn]	s	-	-	-	-	q	-	[ny]	6.
P	g	-	-	p	-	-	-	-	q	-	[ny]	7.

Examples:
1. vseki, vsekigo, vsekimu
2. vsyakakyv
3. vsyaka, vsyakakva
4. vsyakoi, vsyakakvi
5. vsitchkiya, vsitchikiyat
6. vsitchka, vsitchkata
7. vsitchki, vsitchkite

8.5 Determiner (D)

Not applicable.

8.6 Article (T)

Not applicable.

8.7 Adverb (R)

P	ATT	VAL	Example	C
1	Type	general	tuk	g
	l.s.	adjectival	umno	a
2	Degree			-
3	Clitic			-
4	Number			-

P	ATT	VAL	Example	C
5	Person			-

Combinations

POS	Type	Degr	Clct	Numb	Pers	Example
R	g	-	-	-	-	tuk, mnogo
R	a	-	-	-	-	umno, veselo, studeno

Note: Adverbs of type adjectival have the same form as adjectives in Gender = neuter, Person = 3, Number = singular.

8.8 Adposition (S)

P	ATT	VAL	Example	C
1	Type	preposition	na, v	p
2	Formation			-
3	Case			-
4	Clitic			-

Combinations

POS	Type	Form	Case	Cltc	Examples
S	p	-	-	-	na, za, v, okolo, spored

8.9 Conjunction (C)

P	ATT	VAL	Example	C
1	Type	coordinating	a, ala, ili	c
		subordinating	tche, da	s

2 Formation	simple	a, i, tche	s
	compound	i_da, za_da	c
3 Coord_Type			-
4 Sub_Type			-
5 Clitic			-
6 Number			-
7 Person			-

Combinations

PoS	Type	Form	CTyp	SubT	Clit	Numb	Pers	Examples
C	c	[sc]	-	-	-	-	-	i, a, ami, tche, tyj_tche
C	s	[sc]	-	-	-	-	-	tche, da, kato, za_da

8.10 Numeral (M)

P ATT	VAL	Example	C
1 Type	cardinal	edin	c
	ordinal	vtori	o
2 Gender	masculine	edin	m
	feminine	edna	f
	neuter	edno	n
3 Number	singular	edin	s
	plural	edni	p
4 Case		-	-
5 Form	digit	1984	d
	roman	IX	r
	letter	dva	l
l.s.	m_form	dvama	m
l.s.	approx	stotina	a
6 Definiteness	no	edin	n
	yes	ednata	y
	short_art	ediniya	s
	full_art	ediniyat	f
7 Clitic			-
8 Class			-
9 Animate			-
10Owner_Number			-
11Owner_Person			-
12Owned_Number			-

Combinations

PoS	Type	Gend	Numb	Case	Frm	Def	Clit	Clas	Anim	OwnN	OwnP	OwdN	Example
Cardinal													
M	c	-	-	-	d	-	-	-	-	-	-	-	1.
M	c	-	-	-	r	-	-	-	-	-	-	-	2.
M	c	m	s	-	l	[nsf]	-	-	-	-	-	-	3.
M	c	[fn]	s	-	l	[ny]	-	-	-	-	-	-	4.
M	c	-	p	-	l	[ny]	-	-	-	-	-	-	5.
M	c	[mfn]	p	-	l	[ny]	-	-	-	-	-	-	6.
M	c	m	p	-	m	[ny]	-	-	-	-	-	-	7.
M	c	-	p	-	l	[ny]	-	-	-	-	-	-	8.
M	c	-	p	-	a	[ny]	-	-	-	-	-	-	9.
Ordinal													
M	o	m	s	-	-	[nsf]	-	-	-	-	-	-	10.
M	o	[fn]	s	-	-	[ny]	-	-	-	-	-	-	11.
M	o	-	p	-	-	[ny]	-	-	-	-	-	-	12.

Examples:
1. 1984
2. IX
3. edin, ediniya, ediniyat
4. edna, ednata, edno, ednoto
5. edni, ednite
6. dva, dvata, dve, dvete
7. dvama, dvamata, trima
8. tri, trite, chetiri
9. stotina, stotinata
10. pyrvi, pyrviya, pyrviyat
11. pyrva, pyrvata
12. pyrvi, pyrvite

8.11 Interjection (I)

P	ATT	VAL	Example	C
1	Type			-
2	Formation	simple	ah	s
		compound	bozhe moj!	c

Combinations

POS	Type	Formation	Examples
I	-	s	o, hm-m, ha-ha, ah-lele, uvi
I	-	c	diavol_da_go_vzeme, ama_rabota, bozhe_moj

8.12 Residual (X)

P	ATT	VAL	C
P	ATT		-

8.13 Abbreviation (Y)

P	ATT	VAL	Example	C
1	Syntactic_Type			-
2	Gender			
3	Number			
4	Case			
5	Definiteness			

Note: As there are no Attributes for Abbreviations, this section
is has no examples

Combinations

PoS	SynT	Gend	Numb	Case	Def	Examples
Y	-	-	-	-	-	t.n., vzh., lat., razg...

8.14 Particle (Q)

P	ATT	VAL	Example	C
1	Type	negative	ne, ni	z
		general	a, be	g
		comparative	po, naj	c
		verbal	da, ste	v
		interrogative	li, dali	q
		modal	da, dano	o
2	Formation	simple	a, ne	s
		compound	hajde_de	c
3	Clitic			-

Combinations

POS	Type	Form	Cltc	Examples
Q	[go]	[sc]	-	a, be, neka,hajde_de
Q	[cvzq]	s	-	po, naj, ne, li, nali

Note: In Bulgarian superlative particles "po" and "naj" precede
the superlative Forms of adjectives and adverbs:
"po-hubav", "naj-hubav", "po-bavno", "naj-bavno".

Chapter 9

Application to Estonian

Authors:
H.J. Kaalep.

Notes:

1. Two additional tables are provided for every POS: one for definitions and one for examples. For nouns, adjectives, numerals and pronouns the table of examples contains more rows than the table of definitions. This is because in Estonian there are two equal ways for forming 11–12 plural cases for these POS and both are given.
2. The ordering of attributes is the same as in the synoptic tables of the proposal.

9.1 Nouns (N)

```
1.1. Lexicon

= ============== ============== = ============
P ATT            VAL            C EXAMPLE
= ============== ============== = ============
1 Type           common         c jalg
                 proper         p London
- -------------- -------------- - ------------
2 Gender                        -
- -------------- -------------- - ------------
3 Number         singular       s jalg
                 plural         p jalad
- -------------- -------------- - ------------
4 Case           nominative     n jalg
                 genitive       g jala
           l.s.  partitive      1 jalga
                 illative       x jalasse
                 inessive       2 jalas
                 elative        e jalast
                 allative       t jalale
```



```
                 adessive       3 jalal
                 ablative       b jalalt
           l.s.  translative    4 jalaks
                 terminative    9 jalani
                 essive         w jalana
           l.s.  abessive       5 jalata
           l.s.  komitative     k jalaga
           l.s.  aditive        7 jalga
* ***************************** * ************
5 Definiteness                  -
- -------------- -------------- - ------------
6 Clitic                        -
- -------------- -------------- - ------------
7 Animate                       -
- -------------- -------------- - ------------
8 Owner_Number                  -
- -------------- -------------- - ------------
9 Owner_Person                  -
---------------- -------------- - ------------
10Owned_Number                  -
================================ ============
```

```
1.2. Definitions

Corpus tags       Lexicon       Definitions
-------------------------------------------------------
NCSX    Nc      Noun common
NCSN    Nc-sn   Noun common singular nominative
NCSG    Nc-sg   Noun common singular genitive
NCS1    Nc-s1   Noun common singular partitive
NCSA    Nc-sx   Noun common singular illative
NCSA    Nc-s2   Noun common singular inessive
NCSA    Nc-se   Noun common singular elative
NCSA    Nc-st   Noun common singular allative
NCSA    Nc-s3   Noun common singular adessive
NCSA    Nc-sb   Noun common singular ablative
NCS     Nc-s4   Noun common singular translative
NCS     Nc-s9   Noun common singular terminative
NCS     Nc-sw   Noun common singular essive
NCS     Nc-s5   Noun common singular abessive
NCS     Nc-sk   Noun common singular komitative
NCSA    Nc-s7   Noun common singular aditive
NCSN    Nc-pn   Noun common plural nominative
NCSG    Nc-pg   Noun common plural genitive
NCS1    Nc-p1   Noun common plural partitive
NCSA    Nc-px   Noun common plural illative
NCSA    Nc-p2   Noun common plural inessive
NCSA    Nc-pe   Noun common plural elative
NCSA    Nc-pt   Noun common plural allative
NCSA    Nc-p3   Noun common plural adessive
NCSA    Nc-pb   Noun common plural ablative
NCS     Nc-p4   Noun common plural translative
```

NCS	Nc-p9	Noun common plural terminative
NCS	Nc-pw	Noun common plural essive
NCS	Nc-p5	Noun common plural abessive
NCS	Nc-pk	Noun common plural komitative
NPSN	Np	Noun proper
NPSN	Np-sn	Noun proper singular nominative
NPSG	Np-sg	Noun proper singular genitive
NPS1	Np-s1	Noun proper singular partitive
NPSA	Np-sx	Noun proper singular illative
NPSA	Np-s2	Noun proper singular inessive
NPSA	Np-se	Noun proper singular elative
NPSA	Np-st	Noun proper singular allative
NPSA	Np-s3	Noun proper singular adessive
NPSA	Np-sb	Noun proper singular ablative
NPS	Np-s4	Noun proper singular translative
NPS	Np-s9	Noun proper singular terminative
NPS	Np-sw	Noun proper singular essive
NPS	Np-s5	Noun proper singular abessive
NPS	Np-sk	Noun proper singular komitative
NPSA	Np-s7	Noun proper singular aditive
NPSN	Np-pn	Noun proper plural nominative
NPSG	Np-pg	Noun proper plural genitive
NPS1	Np-p1	Noun proper plural partitive
NPSA	Np-px	Noun proper plural illative
NPSA	Np-p2	Noun proper plural inessive
NPSA	Np-pe	Noun proper plural elative
NPSA	Np-pt	Noun proper plural allative
NPSA	Np-p3	Noun proper plural adessive
NPSA	Np-pb	Noun proper plural ablative
NPS	Np-p4	Noun proper plural translative
NPS	Np-p9	Noun proper plural terminative
NPS	Np-pw	Noun proper plural essive
NPS	Np-p5	Noun proper plural abessive
NPS	Np-pk	Noun proper plural komitative

1.3. Examples

Corpus tags	Lexicon	Examples
NCSX	Nc	kesk-
NCSN	Nc-sn	jalg
NCSG	Nc-sg	jala
NCS1	Nc-s1	jalga
NCSA	Nc-sx	jalasse
NCSA	Nc-s2	jalas
NCSA	Nc-se	jalast
NCSA	Nc-st	jalale
NCSA	Nc-s3	jalal
NCSA	Nc-sb	jalalt
NCS	Nc-s4	jalaks
NCS	Nc-s9	jalani

NCS	Nc-sw	jalana
NCS	Nc-s5	jalata
NCS	Nc-sk	jalaga
NCSA	Nc-s7	jalga
NCSN	Nc-pn	jalad,
NCSG	Nc-pg	jalgade,
NCS1	Nc-p1	jalgasid, jalgu
NCSA	Nc-px	jalgadesse, jalusse
NCSA	Nc-p2	jalgades, jalus
NCSA	Nc-pe	jalgadest, jalust
NCSA	Nc-pt	jalgadele, jalule
NCSA	Nc-p3	jalgadel, jalul
NCSA	Nc-pb	jalgadelt, jalult
NCS	Nc-p4	jalgadeks, jaluks
NCS	Nc-p9	jalgadeni
NCS	Nc-pw	jalgadena
NCS	Nc-p5	jalgadeta
NCS	Nc-pk	jalgadega
NPSN	Np	Kesk-
NPSN	Np-sn	Julia
NPSG	Np-sg	Julia
NPS1	Np-s1	Juliat
NPSA	Np-sx	Juliasse
NPSA	Np-s2	Julias
NPSA	Np-se	Juliast
NPSA	Np-st	Juliale
NPSA	Np-s3	Julial
NPSA	Np-sb	Julialt
NPS	Np-s4	Juliaks
NPS	Np-s9	Juliani
NPS	Np-sw	Juliana
NPS	Np-s5	Juliata
NPS	Np-sk	gJuliaga
NPSA	Np-s7	Londoni
NPSN	Np-pn	Juliad,
NPSG	Np-pg	Juliate,
NPS1	Np-p1	Juliaid,
NPSA	Np-px	Juliatesse, Juliaisse
NPSA	Np-p2	Juliates, Juliais
NPSA	Np-pe	Juliatest, Juliaist
NPSA	Np-pt	Juliatele, Juliaile
NPSA	Np-p3	Juliatel, Juliail
NPSA	Np-pb	Juliatelt, Juliailt
NPS	Np-p4	Juliateks, Juliaiks
NPS	Np-p9	Juliateni
NPS	Np-pw	Juliatena
NPS	Np-p5	Juliateta
NPS	Np-pk	Juliatega

9.2 Verbs (V)

2.1. Lexicon

```
= ============== ============== = ============
P ATT            VAL            C EXAMPLE
= ============== ============== = ============
1 Type           main           m lugema
                 auxiliary      a olema
                 modal          o saama
- -------------- -------------- - ------------
2 VForm          indicative     i loen
                 imperative     m loe
                 conditional    c loeksin
                 infinitive     n lugeda
                 participle     p lugev
                 gerund         g lugedes
                 supine         u lugema
            l.s. quotative      q lugevat
- -------------- -------------- - ------------
3 Tense          present        p loen
                 imperfect      i lugesin
                 past           s lugenuvat
- -------------- -------------- - ------------
4 Person         first          1 loen
                 second         2 loed
                 third          3 loeb
- -------------- -------------- - ------------
5 Number         singular       s loen
                 plural         p loeme
- -------------- -------------- - ------------
6 Gender                        -
******************************** ************
7 Voice          active         a loen
                 passive        p loetakse
- -------------- -------------- - ------------
8 Negative       no             n loen
                 yes            y (ei) + loeta
- -------------- -------------- - ------------
9 Definiteness                  -
- -------------- -------------- - ------------
10Clitic                        -
- -------------- -------------- - ------------
11Case
                 illative       x lugema
                 inessive       2 lugemas
                 elative        e lugemast
                 translative    4 lugemaks
                 abessive       5 lugemata
- -------------- -------------- - ------------
12Animate                       -
```



```
- -------------- -------------- - ------------
13Clitic_s                      -
================================ ============
```

2.2. Definitions

```
Corpus tags      Lexicon       Definitions
------------------------------------------------------------------------------------
VMS     Vm------n      Verb main afirmative
VM1     Vmip1s-an      Verb main indic present first singular active afirmative
VM2     Vmip2s-an      Verb main indic present second singular active afirmative
VM3     Vmip3s-an      Verb main indic present third singular active afirmative
VM1     Vmip1p-an      Verb main indic present first plural active afirmative
VM2     Vmip2p-an      Verb main indic present second plural active afirmative
VM3     Vmip3p-an      Verb main indic present third plural active afirmative
VMK     Vmip---ay      Verb main indic present active negative
VMP     Vmip---pn      Verb main indic present passive afirmative
VMN     Vmip---py      Verb main indic present passive negative
VM1     Vmii1s-an      Verb main indic imperfect first singular active afirmative
VM2     Vmii2s-an      Verb main indic imperfect second singular active afirmative
VM3     Vmii3s-an      Verb main indic imperfect third singular active afirmative
VM1     Vmii1p-an      Verb main indic imperfect first plural active afirmative
VM2     Vmii2p-an      Verb main indic imperfect second plural active afirmative
VM3     Vmii3p-an      Verb main indic imperfect third plural active afirmative
VMAS    Vmii---ay      Verb main indic imperfect active negative
VMP     Vmii---pn      Verb main indic imperfect passive afirmative
VMK     Vmmp2s-an      Verb main imper present second singular active afirmative
VMK     Vmmp2s-ay      Verb main imper present second singular active negative
VMK     Vmip---ay      Verb main indic present active negative
VM3     Vmmp3s-an      Verb main imper present third singular active afirmative
VMK     Vmmp1p-an      Verb main imper present first plural active afirmative
VMK     Vmmp2p-an      Verb main imper present second plural active afirmative
VM3     Vmmp3p-an      Verb main imper present third plural active afirmative
VMP     Vmmp---pn      Verb main imper present passive afirmative
VM3     Vmmp3s-ay      Verb main imper present third singular active negative
VMK     Vmmp1p-ay      Verb main imper present first plural active negative
VMK     Vmmp2p-ay      Verb main imper present second plural active negative
VM3     Vmmp3p-ay      Verb main imper present third plural active negative
VMP     Vmmp---py      Verb main imper present passive negative
VMS     Vmcp1s-an      Verb main condit present first singular active afirmative
VMS     Vmcp2s-an      Verb main condit present second singular active afirmative
VMS     Vmcp1s-an      Verb main condit present first singular active afirmative
VMS     Vmcp2s-an      Verb main condit present second singular active afirmative
VMS     Vmcp3s-an      Verb main condit present third singular active afirmative
VMS     Vmcp1p-an      Verb main condit present first plural active afirmative
VMS     Vmcp2p-an      Verb main condit present second plural active afirmative
VMS     Vmcp3p-an      Verb main condit present third plural active afirmative
VMS     Vmcp1p-an      Verb main condit present first plural active afirmative
VMS     Vmcp2p-an      Verb main condit present second plural active afirmative
VMS     Vmcp3p-an      Verb main condit present third plural active afirmative
VMS     Vmcp---ay      Verb main condit present active negative
VMS     Vmcp---ay      Verb main condit present active negative
```

VMP	Vmcp---pn	Verb main condit present passive afirmative
VMS	Vmcs1s-anVerb main condit past first singular active afirmative	
VMS	Vmcs2s-an	Verb main condit past second singular active afirmative
VMS	Vmcs1s-an	Verb main condit past first singular active afirmative
VMS	Vmcs2s-an	Verb main condit past second singular active afirmative
VMS	Vmcs3s-an	Verb main condit past third singular active afirmative
VMS	Vmcs1p-an	Verb main condit past first plural active afirmative
VMS	Vmcs2p-an	Verb main condit past second plural active afirmative
VMS	Vmcs3p-an	Verb main condit past third plural active afirmative
VMS	Vmcs1p-an	Verb main condit past first plural active afirmative
VMS	Vmcs2p-an	Verb main condit past second plural active afirmative
VMS	Vmcs3p-an	Verb main condit past third plural active afirmative
VMS	Vmcs---ay	Verb main condit past active negative
VMS	Vmcs---ay	Verb main condit past active negative
VMP	Vmcs---pn	Verb main condit past passive afirmative
VMP	Vmcp---py	Verb main condit present passive negative
VMP	Vmcs---py	Verb main condit past passive negative
VMD	Vmn	Verb main infinit
VMAP	Vmpp---a	Verb main partic present active
VMAP	Vmpp---p	Verb main partic present passive
VMAS	Vmps---a	Verb main partic past active
VMAS	Vmps---p	Verb main partic past passive
VMAS	Vmii---ay	Verb main indic imperfect active negative
VMAS	Vmii---py	Verb main indic imperfect passive negative
VMG	Vmg	Verb main gerund
VMM	Vmu----a---x	Verb main supine active illative
VMM	Vmu----a---2	Verb main supine active inessive
VMM	Vmu----a---e	Verb main supine active elative
VMG	Vmu----a---4	Verb main supine active translative
VMASS	Vmu----a---5	Verb main supine active abessive
VMM	Vmu----p	Verb main supine passive
VMQ	Vmqp---an	Verb main quotat present active afirmative
VMQ	Vmqp---ay	Verb main quotat present active negative
VMQ	Vmqp---pn	Verb main quotat present passive afirmative
VMQ	Vmqs---an	Verb main quotat past active afirmative
VMQ	Vmqs---pn	Verb main quotat past passive afirmative
VMQ	Vmqp---ay	Verb main quotat present active negative
VMQ	Vmqp---py	Verb main quotat present passive negative
VMQ	Vmqs---ay	Verb main quotat past active negative
VMQ	Vmqs---py	Verb main quotat past passive negative
VM1	Vaip1s-an	Verb aux indic present first singular active afirmative
VM2	Vaip2s-an	Verb aux indic present second singular active afirmative
VM3	Vaip3s-an	Verb aux indic present third singular active afirmative
VM1	Vaip1p-an	Verb aux indic present first plural active afirmative
VM2	Vaip2p-an	Verb aux indic present second plural active afirmative
VM3	Vaip3p-an	Verb aux indic present third plural active afirmative
VMK	Vaip---ay	Verb aux indic present active negative
VMP	Vaip---pn	Verb aux indic present passive afirmative
VMN	Vaip---py	Verb aux indic present passive negative
VM1	Vaii1s-an	Verb aux indic imperfect first singular active afirmative
VM2	Vaii2s-an	Verb aux indic imperfect second singular active afirmative
VM3	Vaii3s-an	Verb aux indic imperfect third singular active afirmative

VM1	Vaii1p-an	Verb aux indic imperfect first plural active afirmative
VM2	Vaii2p-an	Verb aux indic imperfect second plural active afirmative
VM3	Vaii3p-an	Verb aux indic imperfect third plural active afirmative
VMAS	Vaii---ay	Verb aux indic imperfect active negative
VMP	Vaii---pn	Verb aux indic imperfect passive afirmative
VMK	Vamp2s-an	Verb aux imper present second singular active afirmative
VMK	Vamp2s-ay	Verb aux imper present second singular active negative
VMK	Vaip---ay	Verb aux indic present active negative
VM3	Vamp3s-an	Verb aux imper present third singular active afirmative
VMK	Vamp1p-an	Verb aux imper present first plural active afirmative
VMK	Vamp2p-an	Verb aux imper present second plural active afirmative
VM3	Vamp3p-an	Verb aux imper present third plural active afirmative
VMP	Vamp---pn	Verb aux imper present passive afirmative
VMS	Vamp3s-ay	Verb aux imper present third singular active negative
VMS	Vamp1p-ay	Verb aux imper present first plural active negative
VMS	Vamp2p-ay	Verb aux imper present second plural active negative
VMS	Vamp3p-ay	Verb aux imper present third plural active negative
VMS	Vamp---py	Verb aux imper present passive negative
VMP	Vamp---py	Verb aux imper present passive negative
VMK	Vamp2s-ay	Verb aux imper present second singular active negative
VMS	Vamp3s-ay	Verb aux imper present third singular active negative
VMS	Vamp1p-ay	Verb aux imper present first plural active negative
VMS	Vamp2p-ay	Verb aux imper present second plural active negative
VMS	Vamp3p-ay	Verb aux imper present third plural active negative
VMS	Vacp1s-an	Verb aux condit present first singular active afirmative
VMS	Vacp2s-an	Verb aux condit present second singular active afirmative
VMS	Vacp1s-an	Verb aux condit present first singular active afirmative
VMS	Vacp2s-an	Verb aux condit present second singular active afirmative
VMS	Vacp3s-an	Verb aux condit present third singular active afirmative
VMS	Vacp1p-an	Verb aux condit present first plural active afirmative
VMS	Vacp2p-an	Verb aux condit present second plural active afirmative
VMS	Vacp3p-an	Verb aux condit present third plural active afirmative
VMS	Vacp1p-an	Verb aux condit present first plural active afirmative
VMS	Vacp2p-an	Verb aux condit present second plural active afirmative
VMS	Vacp3p-an	Verb aux condit present third plural active afirmative
VMS	Vacp---ay	Verb aux condit present active negative
VMS	Vacp---ay	Verb aux condit present active negative
VMP	Vacp---pn	Verb aux condit present passive afirmative
VMS	Vacs1s-an	Verb aux condit past first singular active afirmative
VMS	Vacs2s-an	Verb aux condit past second singular active afirmative
VMS	Vacs1s-an	Verb aux condit past first singular active afirmative
VMS	Vacs2s-an	Verb aux condit past second singular active afirmative
VMS	Vacs3s-an	Verb aux condit past third singular active afirmative
VMS	Vacs1p-an	Verb aux condit past first plural active afirmative
VMS	Vacs2p-an	Verb aux condit past second plural active afirmative
VMS	Vacs3p-an	Verb aux condit past third plural active afirmative
VMS	Vacs1p-an	Verb aux condit past first plural active afirmative
VMS	Vacs2p-an	Verb aux condit past second plural active afirmative
VMS	Vacs3p-an	Verb aux condit past third plural active afirmative
VMS	Vacs---ay	Verb aux condit past active negative
VMS	Vacs---ay	Verb aux condit past active negative
VMP	Vacs---pn	Verb aux condit past passive afirmative
VMP	Vacp---py	Verb aux condit present passive negative

```
VMP     Vacs---py       Verb aux condit past passive negative
VMD     Van     Verb aux infinit
VMAP    Vapp---a        Verb aux partic present active
VMAP    Vapp---p        Verb aux partic present passive
VMAS    Vaps---a        Verb aux partic past active
VMAS    Vaps---p        Verb aux partic past passive
VMAS    Vaii---ay       Verb aux indic imperfect active negative
VMAS    Vaii---py       Verb aux indic imperfect passive negative
VMG     Vag     Verb aux gerund
VMM     Vau----a---x    Verb aux supine active illative
VMM     Vau----a---2    Verb aux supine active inessive
VMM     Vau----a---e    Verb aux supine active elative
VMG     Vau----a---4    Verb aux supine active translative
VMASS   Vau----a---5    Verb aux supine active abessive
VMM     Vau----p        Verb aux supine passive
VMQ     Vaqp---an       Verb aux quotat present active afirmative
VMQ     Vaqp---ay       Verb aux quotat present active negative
VMQ     Vaqp---pn       Verb aux quotat present passive afirmative
VMQ     Vaqs---an       Verb aux quotat past active afirmative
VMQ     Vaqs---pn       Verb aux quotat past passive afirmative
VMQ     Vaqp---ay       Verb aux quotat present active negative
VMQ     Vaqp---py       Verb aux quotat present passive negative
VMQ     Vaqs---ay       Verb aux quotat past active negative
VMQ     Vaqs---py       Verb aux quotat past passive negative
VME     Va------y       Verb aux negative

VM1     Voip1s-an       Verb modal indic present first singular active afirmative
VM2     Voip2s-an       Verb modal indic present second singular active afirmative
VM3Voip3s-an    Verb modal indic present third singular active afirmative
VM1     Voip1p-an       Verb modal indic present first plural active afirmative
VM2     Voip2p-an       Verb modal indic present second plural active afirmative
VM3     Voip3p-an       Verb modal indic present third plural active afirmative
VMP     Voip---pn       Verb modal indic present passive afirmative
VMN     Voip---py       Verb modal indic present passive negative
VM1     Voii1s-an       Verb modal indic imperfect first singular active afirmative
VM2     Voii2s-an       Verb modal indic imperfect second singular active afirmative
VM3     Voii3s-an       Verb modal indic imperfect third singular active afirmative
VM1     Voii1p-an       Verb modal indic imperfect first plural active afirmative
VM2     Voii2p-an       Verb modal indic imperfect second plural active afirmative
VM3     Voii3p-an       Verb modal indic imperfect third plural active afirmative
VMP     Voii---pn       Verb modal indic imperfect passive afirmative
VMK     Vomp2s-an       Verb modal imper present second singular active afirmative
VMK     Vomp2s-ay       Verb modal imper present second singular active negative
VMK     Voip---ay       Verb modal indic present active negative
VM3     Vomp3s-an       Verb modal imper present third singular active afirmative
VMK     Vomp1p-an       Verb modal imper present first plural active afirmative
VMK     Vomp2p-an       Verb modal imper present second plural active afirmative
VM3     Vomp3p-an       Verb modal imper present third plural active afirmative
VMP     Vomp---pn       Verb modal imper present passive afirmative
VM3     Vomp3s-ay       Verb modal imper present third singular active negative
VMK     Vomp1p-ay       Verb modal imper present first plural active negative
VMK     Vomp2p-ay       Verb modal imper present second plural active negative
VM3     Vomp3p-ay       Verb modal imper present third plural active negative
```



```
VMP     Vomp---py       Verb modal imper present passive negative
VMS     Vocp1s-an       Verb modal condit present first singular active afirmative
VMS     Vocp2s-an       Verb modal condit present second singular active afirmative
VMS     Vocp1s-an       Verb modal condit present first singular active afirmative
VMS     Vocp2s-an       Verb modal condit present second singular active afirmative
VMS     Vocp3s-an       Verb modal condit present third singular active afirmative
VMS     Vocp1p-an       Verb modal condit present first plural active afirmative
VMS     Vocp2p-an       Verb modal condit present second plural active afirmative
VMS     Vocp3p-an       Verb modal condit present third plural active afirmative
VMS     Vocp1p-an       Verb modal condit present first plural active afirmative
VMS     Vocp2p-an       Verb modal condit present second plural active afirmative
VMS     Vocp3p-an       Verb modal condit present third plural active afirmative
VMS     Vocp---ay       Verb modal condit present active negative
VMP     Vocp---pn       Verb modal condit present passive afirmative
VMS     Vocs1s-an       Verb modal condit past first singular active afirmative
VMS     Vocs2s-an       Verb modal condit past second singular active afirmative
VMS     Vocs1s-an       Verb modal condit past first singular active afirmative
VMS     Vocs2s-an       Verb modal condit past second singular active afirmative
VMS     Vocs3s-an       Verb modal condit past third singular active afirmative
VMS     Vocs1p-an       Verb modal condit past first plural active afirmative
VMS     Vocs2p-an       Verb modal condit past second plural active afirmative
VMS     Vocs3p-an       Verb modal condit past third plural active afirmative
VMS     Vocs1p-an       Verb modal condit past first plural active afirmative
VMS     Vocs2p-an       Verb modal condit past second plural active afirmative
VMS     Vocs3p-an       Verb modal condit past third plural active afirmative
VMS     Vocs---ay       Verb modal condit past active negative
VMP     Vocs---pn       Verb modal condit past passive afirmative
VMP     Vocp---py       Verb modal condit present passive negative
VMP     Vocs---py       Verb modal condit past passive negative
VMD     Von     Verb modal infinit
VMAP    Vopp---a        Verb modal partic present active
VMAP    Vopp---p        Verb modal partic present passive
VMAS    Vops---a        Verb modal partic past active
VMAS    Vops---p        Verb modal partic past passive
VMAS    Voii---ay       Verb modal indic imperfect active negative
VMAS    Voii---py       Verb modal indic imperfect passive negative
VMG     Vog     Verb modal gerund
VMM     Vou----a---x    Verb modal supine active illative
VMM     Vou----a---2    Verb modal supine active inessive
VMM     Vou----a---e    Verb modal supine active elative
VMG     Vou----a---4    Verb modal supine active translative
VMASS   Vou----a---5    Verb modal supine active abessive
VMM     Vou----p        Verb modal supine passive
VMQ     Voqp---an       Verb modal quotat present active afirmative
VMQ     Voqp---pn       Verb modal quotat present passive afirmative
VMQ     Voqs---an       Verb modal quotat past active afirmative
VMQ     Voqs---pn       Verb modal quotat past passive afirmative
VMQ     Voqp---ay       Verb modal quotat present active negative
VMQ     Voqp---py       Verb modal quotat present passive negative
VMQ     Voqs---ay       Verb modal quotat past active negative
VMQ     Voqs---py       Verb modal quotat past passive negative
```

2.3. Examples

```
Corpus tags     Lexicon       Examples
-------------------------------------------
VMS     Vm------n       kuulukse
VM1     Vmip1s-an       loen
VM2     Vmip2s-an       loed
VM3     Vmip3s-an       loeb
VM1     Vmip1p-an       loeme
VM2     Vmip2p-an       loete
VM3     Vmip3p-an       loevad
VMK     Vmip---ay       pole
VMP     Vmip---pn       loetakse
VMN     Vmip---py       (ei)+loeta
VM1     Vmii1s-an       lugesin
VM2     Vmii2s-an       lugesid
VM3     Vmii3s-an       luges
VM1     Vmii1p-an       lugesime
VM2     Vmii2p-an       lugesite
VM3     Vmii3p-an       lugesid
VMAS    Vmii---ay       polnud
VMP     Vmii---pn       loeti
VMK     Vmmp2s-an       loe
VMK     Vmmp2s-ay       (ära) loe
VMK     Vmip---ay       (ei) loe
VM3     Vmmp3s-an       lugegu
VMK     Vmmp1p-an       lugegem
VMK     Vmmp2p-an       lugege
VM3     Vmmp3p-an       lugegu
VMP     Vmmp---pn       loetagu
VM3     Vmmp3s-ay       (ärgu) lugegu
VMK     Vmmp1p-ay       (ärgem) lugegem
VMK     Vmmp2p-ay       (ärge) lugege
VM3     Vmmp3p-ay       (ärgu) lugegu
VMP     Vmmp---py       (ärgu) loetagu
VMS     Vmcp1s-an       loeksin
VMS     Vmcp2s-an       loeksid
VMS     Vmcp1s-an       loeks
VMS     Vmcp2s-an       loeks
VMS     Vmcp3s-an       loeks
VMS     Vmcp1p-an       loeks
VMS     Vmcp2p-an       loeks
VMS     Vmcp3p-an       loeks
VMS     Vmcp1p-an       loeksime
VMS     Vmcp2p-an       loeksite
VMS     Vmcp3p-an       loeksid
VMS     Vmcp---ay       (ei) loeks
VMS     Vmcp---ay       poleks
VMP     Vmcp---pn       loetaks
VMS     Vmcs1s-an       lugenuksin
VMS     Vmcs2s-an       lugenuksid
VMS     Vmcs1s-an       lugenuks
VMS     Vmcs2s-an       lugenuks
```



```
VMS     Vmcs3s-an       lugenuks
VMS     Vmcs1p-an       lugenuks
VMS     Vmcs2p-an       lugenuks
VMS     Vmcs3p-an       lugenuks
VMS     Vmcs1p-an       lugenuksime
VMS     Vmcs2p-an       lugenuksite
VMS     Vmcs3p-an       lugenuksid
VMS     Vmcs---ay       (ei) lugenuks
VMS     Vmcs---ay       polnuks
VMP     Vmcs---pn       loetuks
VMP     Vmcp---py       (ei) loetaks
VMP     Vmcs---py       (ei) loetuks
VMD     Vmn     lugeda
VMAP    Vmpp---a        lugev
VMAP    Vmpp---p        loetav
VMAS    Vmps---a        lugenud
VMAS    Vmps---p        loetud
VMAS    Vmii---ay       (ei) lugenud
VMAS    Vmii---py       (ei) loetud
VMG     Vmg     lugedes
VMM     Vmu----a---x    lugema
VMM     Vmu----a---2    lugemas
VMM     Vmu----a---e    lugemast
VMG     Vmu----a---4    lugemaks
VMASS   Vmu----a---5    lugemata
VMM     Vmu----p        loetama
VMQ     Vmqp---an       lugevat
VMQ     Vmqp---ay       polevat
VMQ     Vmqp---pn       loetavat
VMQ     Vmqs---an       lugenuvat
VMQ     Vmqs---pn       loetuvat
VMQ     Vmqp---ay       (ei) lugevat
VMQ     Vmqp---py       (ei) loetavat
VMQ     Vmqs---ay       (ei) lugenuvat
VMQ     Vmqs---py       (ei) loetuvat

VM1     Vaip1s-an       olen
VM2     Vaip2s-an       oled
VM3     Vaip3s-an       on
VM1     Vaip1p-an       oleme
VM2     Vaip2p-an       olete
VM3     Vaip3p-an       on
VMK     Vaip---ay       pole
VMP     Vaip---pn       ollakse
VMN     Vaip---py       (ei)+olda
VM1     Vaii1s-an       olin
VM2     Vaii2s-an       olid
VM3     Vaii3s-an       oli
VM1     Vaii1p-an       olime
VM2     Vaii2p-an       olite
VM3     Vaii3p-an       olid
VMAS    Vaii---ay       polnud
VMP     Vaii---pn       oldi
```

VMK	Vamp2s-an	ole
VMK	Vamp2s-ay	(ära) ole
VMK	Vaip---ay	(ei) ole
VM3	Vamp3s-an	olgu
VMK	Vamp1p-an	olgem
VMK	Vamp2p-an	olge
VM3	Vamp3p-an	olgu
VMP	Vamp---pn	oldagu
VMS	Vamp3s-ay	(ärgu) olgu
VMS	Vamp1p-ay	(ärgem) olgem
VMS	Vamp2p-ay	(ärge) olge
VMS	Vamp3p-ay	(ärgu) olgu
VMS	Vamp---py	(ärgu) oldagu
VMP	Vamp---py	ärgu
VMK	Vamp2s-ay	ära
VMS	Vamp3s-ay	ärgu
VMS	Vamp1p-ay	ärgem
VMS	Vamp2p-ay	ärge
VMS	Vamp3p-ay	ärgu
VMS	Vacp1s-an	oleksin
VMS	Vacp2s-an	oleksid
VMS	Vacp1s-an	oleks
VMS	Vacp2s-an	oleks
VMS	Vacp3s-an	oleks
VMS	Vacp1p-an	oleks
VMS	Vacp2p-an	oleks
VMS	Vacp3p-an	oleks
VMS	Vacp1p-an	oleksime
VMS	Vacp2p-an	oleksite
VMS	Vacp3p-an	oleksid
VMS	Vacp---ay	(ei) oleks
VMS	Vacp---ay	poleks
VMP	Vacp---pn	oldaks
VMS	Vacs1s-an	olnuksin
VMS	Vacs2s-an	olnuksid
VMS	Vacs1s-an	olnuks
VMS	Vacs2s-an	olnuks
VMS	Vacs3s-an	olnuks
VMS	Vacs1p-an	olnuks
VMS	Vacs2p-an	olnuks
VMS	Vacs3p-an	olnuks
VMS	Vacs1p-an	olnuksime
VMS	Vacs2p-an	olnuksite
VMS	Vacs3p-an	olnuksid
VMS	Vacs---ay	(ei) olnuks
VMS	Vacs---ay	polnuks
VMP	Vacs---pn	olduks
VMP	Vacp---py	(ei) oldaks
VMP	Vacs---py	(ei) olduks
VMD	Van olla	
VMAP	Vapp---a	olev
VMAP	Vapp---p	oldav
VMAS	Vaps---a	olnud

VMAS	Vaps---p	oldud
VMAS	Vaii---ay	(ei) olnud
VMAS	Vaii---py	(ei) oldud
VMG	Vag olles	
VMM	Vau----a---x	olema
VMM	Vau----a---2	olemas
VMM	Vau----a---e	olemast
VMG	Vau----a---4	olemaks
VMASS	Vau----a---5	olemata
VMM	Vau----p	oldama
VMQ	Vaqp---an	olevat
VMQ	Vaqp---ay	polevat
VMQ	Vaqp---pn	oldavat
VMQ	Vaqs---an	olnuvat
VMQ	Vaqs---pn	olduvat
VMQ	Vaqp---ay	(ei) olevat
VMQ	Vaqp---py	(ei) oldavat
VMQ	Vaqs---ay	(ei) olnuvat
VMQ	Vaqs---py	(ei) olduvat
VME	Va------y	ei
VM1	Voip1s-an	saan
VM2	Voip2s-an	saad
VM3	Voip3s-an	saab
VM1	Voip1p-an	saame
VM2	Voip2p-an	saate
VM3	Voip3p-an	saavad
VMP	Voip---pn	saadakse
VMN	Voip---py	(ei)+saada
VM1	Voii1s-an	sain
VM2	Voii2s-an	said
VM3	Voii3s-an	sai
VM1	Voii1p-an	saime
VM2	Voii2p-an	saite
VM3	Voii3p-an	said
VMP	Voii---pn	saadi
VMK	Vomp2s-an	saa
VMK	Vomp2s-ay	(ära) saa
VMK	Voip---ay	(ei) saa
VM3	Vomp3s-an	saagu
VMK	Vomp1p-an	saagem
VMK	Vomp2p-an	saage
VM3	Vomp3p-an	saagu
VMP	Vomp---pn	saadagu
VM3	Vomp3s-ay	(ärgu) saagu
VMK	Vomp1p-ay	(ärgem) saagem
VMK	Vomp2p-ay	(ärge) saage
VM3	Vomp3p-ay	(ärgu) saagu
VMP	Vomp---py	(ärgu) saadagu
VMS	Vocp1s-an	saaksin
VMS	Vocp2s-an	saaksid
VMS	Vocp1s-an	saaks
VMS	Vocp2s-an	saaks

```
VMS     Vocp3s-an       saaks
VMS     Vocp1p-an       saaks
VMS     Vocp2p-an       saaks
VMS     Vocp3p-an       saaks
VMS     Vocp1p-an       saaksime
VMS     Vocp2p-an       saaksite
VMS     Vocp3p-an       saaksid
VMS     Vocp---ay       (ei) saaks
VMP     Vocp---pn       saadaks
VMS     Vocs1s-an       saanuksin
VMS     Vocs2s-an       saanuksid
VMS     Vocs1s-an       saanuks
VMS     Vocs2s-an       saanuks
VMS     Vocs3s-an       saanuks
VMS     Vocs1p-an       saanuks
VMS     Vocs2p-an       saanuks
VMS     Vocs3p-an       saanuks
VMS     Vocs1p-an       saanuksime
VMS     Vocs2p-an       saanuksite
VMS     Vocs3p-an       saanuksid
VMS     Vocs---ay       (ei) saanuks
VMP     Vocs---pn       saaduks
VMP     Vocp---py       (ei) saadaks
VMP     Vocs---py       (ei) saaduks
VMD     Von     saada
VMAP    Vopp---a        saav
VMAP    Vopp---p        saadav
VMAS    Vops---a        saanud
VMAS    Vops---p        saadud
VMAS    Voii---ay       (ei) saanud
VMAS    Voii---py       (ei) saadud
VMG     Vog     saades
VMM     Vou----a---x    saama
VMM     Vou----a---2    saamas
VMM     Vou----a---e    saamast
VMG     Vou----a---4    saamaks
VMASS   Vou----a---5    saamata
VMM     Vou----p        saadama
VMQ     Voqp---an       saavat
VMQ     Voqp---pn       saadavat
VMQ     Voqs---an       saanuvat
VMQ     Voqs---pn       saaduvat
VMQ     Voqp---ay       (ei) saavat
VMQ     Voqp---py       (ei) saadavat
VMQ     Voqs---ay       (ei) saanuvat
VMQ     Voqs---py       (ei) saaduvat
```


9.3 Adjectives (A)

3.1. Lexicon

```
= ============== ============== = ============
P ATT            VAL            C EXAMPLE
= ============== ============== = ============
1 Type                          -
- -------------- -------------- - ------------
2 Degree         positive       p oluline
                 comparative    c olulisem
                 superlative    s olulisim
- -------------- -------------- - ------------
3 Gender                        -
- -------------- -------------- - ------------
4 Number         singular       s oluline
                 plural         p olulised
- -------------- -------------- - ------------
5 Case           nominative     n oluline
                 genitive       g olulise
           l.s.  partitive      1 olulist
                 illative       x olulisesse
                 inessive       2 olulises
                 elative        e olulisest
                 allative       t olulisele
                 adessive       3 olulisel
                 ablative       b oluliselt
           l.s.  translative    4 oluliseks
                 terminative    9 oluliseni
                 essive         w olulisena
           l.s.  abessive       5 oluliseta
           l.s.  komitative     k olulisega
           l.s.  aditive        7 olulisse
* ***************************** * ************
6 Definiteness                  -
- -------------- -------------- - ------------
7 Clitic                        -
- -------------- -------------- - ------------
8 Animate                       -
- -------------- -------------- - ------------
9 Formation                     -
- -------------- -------------- - ------------
10Owner_Number                  -
- -------------- -------------- - ------------
11Owner_Person                  -
---------------- -------------- - ------------
12Owned_Number                  -
================================ ============
```

3.2. Definitions

Corpus tags	Lexicon	Definitions
ASX	A-p	Adjective positive
ASN	A-p-sn	Adjective positive singular nominative
ASG	A-p-sg	Adjective positive singular genitive
AS1	A-p-s1	Adjective positive singular partitive
ASA	A-p-sx	Adjective positive singular illative
ASA	A-p-s2	Adjective positive singular inessive
ASA	A-p-se	Adjective positive singular elative
ASA	A-p-st	Adjective positive singular allative
ASA	A-p-s3	Adjective positive singular adessive
ASA	A-p-sb	Adjective positive singular ablative
AS	A-p-s4	Adjective positive singular translative
AS	A-p-s9	Adjective positive singular terminative
AS	A-p-sw	Adjective positive singular essive
AS	A-p-s5	Adjective positive singular abessive
AS	A-p-sk	Adjective positive singular komitative
ASA	A-p-s7	Adjective positive singular aditive
ASN	A-p-pn	Adjective positive plural nominative
ASG	A-p-pg	Adjective positive plural genitive
AS1	A-p-p1	Adjective positive plural partitive
ASA	A-p-px	Adjective positive plural illative
ASA	A-p-p2	Adjective positive plural inessive
ASA	A-p-pe	Adjective positive plural elative
ASA	A-p-pt	Adjective positive plural allative
ASA	A-p-p3	Adjective positive plural adessive
ASA	A-p-pb	Adjective positive plural ablative
AS	A-p-p4	Adjective positive plural translative
AS	A-p-p9	Adjective positive plural terminative
AS	A-p-pw	Adjective positive plural essive
AS	A-p-p5	Adjective positive plural abessive
AS	A-p-pk	Adjective positive plural komitative
ASN	A-c-sn	Adjective comparative singular nominative
ASG	A-c-sg	Adjective comparative singular genitive
AS1	A-c-s1	Adjective comparative singular partitive
ASA	A-c-sx	Adjective comparative singular illative
ASA	A-c-s2	Adjective comparative singular inessive
ASA	A-c-se	Adjective comparative singular elative
ASA	A-c-st	Adjective comparative singular allative
ASA	A-c-s3	Adjective comparative singular adessive
ASA	A-c-sb	Adjective comparative singular ablative
AS	A-c-s4	Adjective comparative singular translative
AS	A-c-s9	Adjective comparative singular terminative
AS	A-c-sw	Adjective comparative singular essive
AS	A-c-s5	Adjective comparative singular abessive
AS	A-c-sk	Adjective comparative singular komitative
ASN	A-c-pn	Adjective comparative plural nominative
ASG	A-c-pg	Adjective comparative plural genitive
AS1	A-c-p1	Adjective comparative plural partitive
ASA	A-c-px	Adjective comparative plural illative
ASA	A-c-p2	Adjective comparative plural inessive

ASA	A-c-pe	Adjective comparative plural elative
ASA	A-c-pt	Adjective comparative plural allative
ASA	A-c-p3	Adjective comparative plural adessive
ASA	A-c-pb	Adjective comparative plural ablative
AS	A-c-p4	Adjective comparative plural translative
AS	A-c-p9	Adjective comparative plural terminative
AS	A-c-pw	Adjective comparative plural essive
AS	A-c-p5	Adjective comparative plural abessive
AS	A-c-pk	Adjective comparative plural komitative
ASN	A-s-sn	Adjective superlative singular nominative
ASG	A-s-sg	Adjective superlative singular genitive
AS1	A-s-s1	Adjective superlative singular partitive
ASA	A-s-sx	Adjective superlative singular illative
ASA	A-s-s2	Adjective superlative singular inessive
ASA	A-s-se	Adjective superlative singular elative
ASA	A-s-st	Adjective superlative singular allative
ASA	A-s-s3	Adjective superlative singular adessive
ASA	A-s-sb	Adjective superlative singular ablative
AS	A-s-s4	Adjective superlative singular translative
AS	A-s-s9	Adjective superlative singular terminative
AS	A-s-sw	Adjective superlative singular essive
AS	A-s-s5	Adjective superlative singular abessive
AS	A-s-sk	Adjective superlative singular komitative
ASN	A-s-pn	Adjective superlative plural nominative
ASG	A-s-pg	Adjective superlative plural genitive
AS1	A-s-p1	Adjective superlative plural partitive
ASA	A-s-px	Adjective superlative plural illative
ASA	A-s-p2	Adjective superlative plural inessive
ASA	A-s-pe	Adjective superlative plural elative
ASA	A-s-pt	Adjective superlative plural allative
ASA	A-s-p3	Adjective superlative plural adessive
ASA	A-s-pb	Adjective superlative plural ablative
AS	A-s-p4	Adjective superlative plural translative
AS	A-s-p9	Adjective superlative plural terminative
AS	A-s-pw	Adjective superlative plural essive
AS	A-s-p5	Adjective superlative plural abessive
AS	A-s-pk	Adjective superlative plural komitative

3.3. Examples

Corpus tags	Lexicon	Examples
ASX	A-p	salkus
ASN	A-p-sn	oluline
ASG	A-p-sg	olulise
AS1	A-p-s1	olulist
ASA	A-p-sx	olulisesse
ASA	A-p-s2	olulises
ASA	A-p-se	olulisest
ASA	A-p-st	olulisele
ASA	A-p-s3	olulisel

```
ASA    A-p-sb  oluliselt
AS     A-p-s4  oluliseks
AS     A-p-s9  oluliseni
AS     A-p-sw  olulisena
AS     A-p-s5  oluliseta
AS     A-p-sk  olulisega
ASA    A-p-s7  olulisse
ASN    A-p-pn  olulised
ASG    A-p-pg  oluliste
AS1    A-p-p1  olulisi
ASA    A-p-px  olulistesse, olulisisse
ASA    A-p-p2  olulistes, olulisis
ASA    A-p-pe  olulistest, olulisist
ASA    A-p-pt  olulistele, olulisile
ASA    A-p-p3  olulistel, olulisil
ASA    A-p-pb  olulistelt, olulisilt
AS     A-p-p4  olulisteks, olulisiks
AS     A-p-p9  olulisteni
AS     A-p-pw  olulistena
AS     A-p-p5  olulisteta
AS     A-p-pk  olulistega

ASN    A-c-sn  olulisem
ASG    A-c-sg  olulisema
AS1    A-c-s1  olulisemat
ASA    A-c-sx  olulisemasse
ASA    A-c-s2  olulisemas
ASA    A-c-se  olulisemast
ASA    A-c-st  olulisemale
ASA    A-c-s3  olulisemal
ASA    A-c-sb  olulisemalt
AS     A-c-s4  olulisemaks
AS     A-c-s9  olulisemani
AS     A-c-sw  olulisemana
AS     A-c-s5  olulisemata
AS     A-c-sk  olulisemaga
ASN    A-c-pn  olulisemad
ASG    A-c-pg  olulisemate
AS1    A-c-p1  olulisemaid
ASA    A-c-px  olulisematesse, olulisemaisse
ASA    A-c-p2  olulisemates, olulisemais
ASA    A-c-pe  olulisematest, olulisemaist
ASA    A-c-pt  olulisematele, olulisemaile
ASA    A-c-p3  olulisematel, olulisemail
ASA    A-c-pb  olulisematelt, olulisemailt
AS     A-c-p4  olulisemateks, olulisemaiks
AS     A-c-p9  olulisemateni, olulisemaini
AS     A-c-pw  olulisematena, olulisemaina
AS     A-c-p5  olulisemateta
AS     A-c-pk  olulisemātega
```

```
ASN    A-s-sn  olulisim
ASG    A-s-sg  olulisima
```



```
AS1    A-s-s1  olulisimat
ASA    A-s-sx  olulisimasse
ASA    A-s-s2  olulisimas
ASA    A-s-se  olulisimast
ASA    A-s-st  olulisimale
ASA    A-s-s3  olulisimal
ASA    A-s-sb  olulisimalt
AS     A-s-s4  olulisimaks
AS     A-s-s9  olulisimani
AS     A-s-sw  olulisimana
AS     A-s-s5  olulisimata
AS     A-s-sk  olulisimaga
ASN    A-s-pn  olulisimad
ASG    A-s-pg  olulisimate
AS1    A-s-p1  olulisimaid
ASA    A-s-px  olulisimatesse, olulisimaisse
ASA    A-s-p2  olulisimates, olulisimais
ASA    A-s-pe  olulisimatest, olulisimaist
ASA    A-s-pt  olulisimatele, olulisimaile
ASA    A-s-p3  olulisimatel, olulisimail
ASA    A-s-pb  olulisimatelt, olulisimailt
AS     A-s-p4  olulisimateks, olulisimaiks
AS     A-s-p9  olulisimateni, olulisimaini
AS     A-s-pw  olulisimatena, olulisimaina
AS     A-s-p5  olulisimateta
AS     A-s-pk  olulisimatega
```

9.4 Pronouns (P)

```
4.1. Lexicon

= ============== ============== = ============
P ATT            VAL            C EXAMPLE
= ============== ============== = ============
1 Type           personal       p mina
                 demonstrative  d selline
                 indefinite     i mingi
                 possessive     s iseenese
                 interrogative  q milline
                 relative       r milline
                 reflexive      x iseenda
                 reciprocal     y teineteise
            l.s. determinal     m ise
- -------------- -------------- - ------------
2 Person         first          1 mina
                 second         2 sina
                 third          3 tema
- -------------- -------------- - ------------
```

```
3 Gender                         -
- -------------- -------------- - ------------
4 Number         singular       s mina
                 plural         p meie
- -------------- -------------- - ------------
5 Case           nominative     n mina
                 genitive       g minu
           l.s.  partitive      1 mind
                 illative       x minusse
                 inessive       2 minus
                 elative        e minust
                 allative       t minule
                 adessive       3 minul
                 ablative       b minult
           l.s.  translative    4 minuks
                 terminative    9 minuni
                 essive         w minuna
           l.s.  abessive       5 minuta
           l.s.  komitative     k minuga
           l.s.  aditive        7 sellisse
- -------------- -------------- - ------------
6 Owner_Number                   -
- -------------- -------------- - ------------
7 Owner_Gender                   -
******************************** ************
8 Clitic                         -
- -------------- -------------- - ------------
9 Referent_Type                  -
- -------------- -------------- - ------------
10Syntactic_Type                 -
- -------------- -------------- - ------------
11Definiteness                   -
- -------------- -------------- - ------------
12Animate                        -
- -------------- -------------- - ------------
13Clitic_s                       -
- -------------- -------------- - ------------
14Pronoun_Form                   -
- -------------- -------------- - ------------
15Owner_Person                   -
- -------------- -------------- - ------------
16Owned_Number                   -
================================ ============
```

4.2. Definitions

```
Corpus tags      Lexicon       Definitions
-----------------------------------------------------------------
PP1SN   Pp1-sn  Pronoun personal first singular nominative
PP1SG   Pp1-sg  Pronoun personal first singular genitive
PP1S1   Pp1-s1  Pronoun personal first singular partitive
PP1S    Pp1-sx  Pronoun personal first singular illative
```



```
PP1SA   Pp1-s2  Pronoun personal first singular inessive
PP1SA   Pp1-se  Pronoun personal first singular elative
PP1SA   Pp1-st  Pronoun personal first singular allative
PP1SA   Pp1-s3  Pronoun personal first singular adessive
PP1SA   Pp1-sb  Pronoun personal first singular ablative
PP1S    Pp1-s4  Pronoun personal first singular translative
PP1S    Pp1-s9  Pronoun personal first singular terminative
PP1S    Pp1-sw  Pronoun personal first singular essive
PP1S    Pp1-s5  Pronoun personal first singular abessive
PP1S    Pp1-sk  Pronoun personal first singular komitative
PP1SN   Pp1-pn  Pronoun personal first plural nominative
PP1SG   Pp1-pg  Pronoun personal first plural genitive
PP1S1   Pp1-p1  Pronoun personal first plural partitive
PP1S    Pp1-px  Pronoun personal first plural illative
PP1SA   Pp1-p2  Pronoun personal first plural inessive
PP1SA   Pp1-pe  Pronoun personal first plural elative
PP1SA   Pp1-pt  Pronoun personal first plural allative
PP1SA   Pp1-p3  Pronoun personal first plural adessive
PP1SA   Pp1-pb  Pronoun personal first plural ablative
PP1S    Pp1-p4  Pronoun personal first plural translative
PP1S    Pp1-p9  Pronoun personal first plural terminative
PP1S    Pp1-pw  Pronoun personal first plural essive
PP1S    Pp1-p5  Pronoun personal first plural abessive
PP1S    Pp1-pk  Pronoun personal first plural komitative
PP2SN   Pp2-sn  Pronoun personal second singular nominative
PP2SG   Pp2-sg  Pronoun personal second singular genitive
PP2S1   Pp2-s1  Pronoun personal second singular partitive
PP2S    Pp2-sx  Pronoun personal second singular illative
PP2SA   Pp2-s2  Pronoun personal second singular inessive
PP2SA   Pp2-se  Pronoun personal second singular elative
PP2SA   Pp2-st  Pronoun personal second singular allative
PP2SA   Pp2-s3  Pronoun personal second singular adessive
PP2SA   Pp2-sb  Pronoun personal second singular ablative
PP2S    Pp2-s4  Pronoun personal second singular translative
PP2S    Pp2-s9  Pronoun personal second singular terminative
PP2S    Pp2-sw  Pronoun personal second singular essive
PP2S    Pp2-s5  Pronoun personal second singular abessive
PP2S    Pp2-sk  Pronoun personal second singular komitative
PP2SN   Pp2-pn  Pronoun personal second plural nominative
PP2SG   Pp2-pg  Pronoun personal second plural genitive
PP2S1   Pp2-p1  Pronoun personal second plural partitive
PP2S    Pp2-px  Pronoun personal second plural illative
PP2SA   Pp2-p2  Pronoun personal second plural inessive
PP2SA   Pp2-pe  Pronoun personal second plural elative
PP2SA   Pp2-pt  Pronoun personal second plural allative
PP2SA   Pp2-p3  Pronoun personal second plural adessive
PP2SA   Pp2-pb  Pronoun personal second plural ablative
PP2S    Pp2-p4  Pronoun personal second plural translative
PP2S    Pp2-p9  Pronoun personal second plural terminative
PP2S    Pp2-pw  Pronoun personal second plural essive
PP2S    Pp2-p5  Pronoun personal second plural abessive
PP2S    Pp2-pk  Pronoun personal second plural komitative
PP3SN   Pp3-sn  Pronoun personal third singular nominative
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PP3SG	Pp3-sg	Pronoun personal third singular genitive
PP3S1	Pp3-s1	Pronoun personal third singular partitive
PP3S	Pp3-sx	Pronoun personal third singular illative
PP3SA	Pp3-s2	Pronoun personal third singular inessive
PP3SA	Pp3-se	Pronoun personal third singular elative
PP3SA	Pp3-st	Pronoun personal third singular allative
PP3SA	Pp3-s3	Pronoun personal third singular adessive
PP3SA	Pp3-sb	Pronoun personal third singular ablative
PP3S	Pp3-s4	Pronoun personal third singular translative
PP3S	Pp3-s9	Pronoun personal third singular terminative
PP3S	Pp3-sw	Pronoun personal third singular essive
PP3S	Pp3-s5	Pronoun personal third singular abessive
PP3S	Pp3-sk	Pronoun personal third singular komitative
PP3SN	Pp3-pn	Pronoun personal third plural nominative
PP3SG	Pp3-pg	Pronoun personal third plural genitive
PP3S1	Pp3-p1	Pronoun personal third plural partitive
PP3S	Pp3-px	Pronoun personal third plural illative
PP3SA	Pp3-p2	Pronoun personal third plural inessive
PP3SA	Pp3-pe	Pronoun personal third plural elative
PP3SA	Pp3-pt	Pronoun personal third plural allative
PP3SA	Pp3-p3	Pronoun personal third plural adessive
PP3SA	Pp3-pb	Pronoun personal third plural ablative
PP3S	Pp3-p4	Pronoun personal third plural translative
PP3S	Pp3-p9	Pronoun personal third plural terminative
PP3S	Pp3-pw	Pronoun personal third plural essive
PP3S	Pp3-p5	Pronoun personal third plural abessive
PP3S	Pp3-pk	Pronoun personal third plural komitative

PSN	Pd--sn	Pronoun demonstrative singular nominative
PSG	Pd--sg	Pronoun demonstrative singular genitive
PS1	Pd--s1	Pronoun demonstrative singular partitive
PSA	Pd--sx	Pronoun demonstrative singular illative
PSA	Pd--s2	Pronoun demonstrative singular inessive
PSA	Pd--se	Pronoun demonstrative singular elative
PSA	Pd--st	Pronoun demonstrative singular allative
PSA	Pd--s3	Pronoun demonstrative singular adessive
PSA	Pd--sb	Pronoun demonstrative singular ablative
PS	Pd--s4	Pronoun demonstrative singular translative
PS	Pd--s9	Pronoun demonstrative singular terminative
PS	Pd--sw	Pronoun demonstrative singular essive
PS	Pd--s5	Pronoun demonstrative singular abessive
PS	Pd--sk	Pronoun demonstrative singular komitative
PSA	Pd--s7	Pronoun demonstrative singular aditive
PSN	Pd--pn	Pronoun demonstrative plural nominative
PSG	Pd--pg	Pronoun demonstrative plural genitive
PS1	Pd--p1	Pronoun demonstrative plural partitive
PSA	Pd--px	Pronoun demonstrative plural illative
PSA	Pd--p2	Pronoun demonstrative plural inessive
PSA	Pd--pe	Pronoun demonstrative plural elative
PSA	Pd--pt	Pronoun demonstrative plural allative
PSA	Pd--p3	Pronoun demonstrative plural adessive
PSA	Pd--pb	Pronoun demonstrative plural ablative
PS	Pd--p4	Pronoun demonstrative plural translative

PS	Pd--p9	Pronoun demonstrative plural terminative
PS	Pd--pw	Pronoun demonstrative plural essive
PS	Pd--p5	Pronoun demonstrative plural abessive
PS	Pd--pk	Pronoun demonstrative plural komitative

PSX	Pi	Pronoun indefinite
PSN	Pi--sn	Pronoun indefinite singular nominative
PSG	Pi--sg	Pronoun indefinite singular genitive
PS1	Pi--s1	Pronoun indefinite singular partitive
PSA	Pi--sx	Pronoun indefinite singular illative
PSA	Pi--s2	Pronoun indefinite singular inessive
PSA	Pi--se	Pronoun indefinite singular elative
PSA	Pi--st	Pronoun indefinite singular allative
PSA	Pi--s3	Pronoun indefinite singular adessive
PSA	Pi--sb	Pronoun indefinite singular ablative
PS	Pi--s4	Pronoun indefinite singular translative
PS	Pi--s9	Pronoun indefinite singular terminative
PS	Pi--sw	Pronoun indefinite singular essive
PS	Pi--s5	Pronoun indefinite singular abessive
PS	Pi--sk	Pronoun indefinite singular komitative
PSA	Pi--s7	Pronoun indefinite singular aditive
PSN	Pi--pn	Pronoun indefinite plural nominative
PSG	Pi--pg	Pronoun indefinite plural genitive
PS1	Pi--p1	Pronoun indefinite plural partitive
PSA	Pi--px	Pronoun indefinite plural illative
PSA	Pi--p2	Pronoun indefinite plural inessive
PSA	Pi--pe	Pronoun indefinite plural elative
PSA	Pi--pt	Pronoun indefinite plural allative
PSA	Pi--p3	Pronoun indefinite plural adessive
PSA	Pi--pb	Pronoun indefinite plural ablative
PS	Pi--p4	Pronoun indefinite plural translative
PS	Pi--p9	Pronoun indefinite plural terminative
PS	Pi--pw	Pronoun indefinite plural essive
PS	Pi--p5	Pronoun indefinite plural abessive
PS	Pi--pk	Pronoun indefinite plural komitative

PSX	Ps	Pronoun possessive
PSN	Ps--sn	Pronoun possessive singular nominative
PSG	Ps--sg	Pronoun possessive singular genitive
PS1	Ps--s1	Pronoun possessive singular partitive
PSA	Ps--sx	Pronoun possessive singular illative
PSA	Ps--s2	Pronoun possessive singular inessive
PSA	Ps--se	Pronoun possessive singular elative
PSA	Ps--st	Pronoun possessive singular allative
PSA	Ps--s3	Pronoun possessive singular adessive
PSA	Ps--sb	Pronoun possessive singular ablative
PS	Ps--s4	Pronoun possessive singular translative
PS	Ps--s9	Pronoun possessive singular terminative
PS	Ps--sw	Pronoun possessive singular essive
PS	Ps--s5	Pronoun possessive singular abessive
PS	Ps--sk	Pronoun possessive singular komitative
PSN	Ps--pn	Pronoun possessive plural nominative
PSG	Ps--pg	Pronoun possessive plural genitive

PS1	Ps--p1	Pronoun possessive plural partitive
PSA	Ps--px	Pronoun possessive plural illative
PSA	Ps--p2	Pronoun possessive plural inessive
PSA	Ps--pe	Pronoun possessive plural elative
PSA	Ps--pt	Pronoun possessive plural allative
PSA	Ps--p3	Pronoun possessive plural adessive
PSA	Ps--pb	Pronoun possessive plural ablative
PS	Ps--p4	Pronoun possessive plural translative
PS	Ps--p9	Pronoun possessive plural terminative
PS	Ps--pw	Pronoun possessive plural essive
PS	Ps--p5	Pronoun possessive plural abessive
PS	Ps--pk	Pronoun possessive plural komitative

PSN	Pq--sn	Pronoun interrogative singular nominative
PSG	Pq--sg	Pronoun interrogative singular genitive
PS1	Pq--s1	Pronoun interrogative singular partitive
PSA	Pq--sx	Pronoun interrogative singular illative
PSA	Pq--s2	Pronoun interrogative singular inessive
PSA	Pq--se	Pronoun interrogative singular elative
PSA	Pq--st	Pronoun interrogative singular allative
PSA	Pq--s3	Pronoun interrogative singular adessive
PSA	Pq--sb	Pronoun interrogative singular ablative
PS	Pq--s4	Pronoun interrogative singular translative
PS	Pq--s9	Pronoun interrogative singular terminative
PS	Pq--sw	Pronoun interrogative singular essive
PS	Pq--s5	Pronoun interrogative singular abessive
PS	Pq--sk	Pronoun interrogative singular komitative
PSA	Pq--s7	Pronoun interrogative singular aditive
PSN	Pq--pn	Pronoun interrogative plural nominative
PSG	Pq--pg	Pronoun interrogative plural genitive
PS1	Pq--p1	Pronoun interrogative plural partitive
PSA	Pq--px	Pronoun interrogative plural illative
PSA	Pq--p2	Pronoun interrogative plural inessive
PSA	Pq--pe	Pronoun interrogative plural elative
PSA	Pq--pt	Pronoun interrogative plural allative
PSA	Pq--p3	Pronoun interrogative plural adessive
PSA	Pq--pb	Pronoun interrogative plural ablative
PS	Pq--p4	Pronoun interrogative plural translative
PS	Pq--p9	Pronoun interrogative plural terminative
PS	Pq--pw	Pronoun interrogative plural essive
PS	Pq--p5	Pronoun interrogative plural abessive
PS	Pq--pk	Pronoun interrogative plural komitative

PSN	Pr--sn	Pronoun relative singular nominative
PSG	Pr--sg	Pronoun relative singular genitive
PS1	Pr--s1	Pronoun relative singular partitive
PSA	Pr--sx	Pronoun relative singular illative
PSA	Pr--s2	Pronoun relative singular inessive
PSA	Pr--se	Pronoun relative singular elative
PSA	Pr--st	Pronoun relative singular allative
PSA	Pr--s3	Pronoun relative singular adessive
PSA	Pr--sb	Pronoun relative singular ablative
PS	Pr--s4	Pronoun relative singular translative

PS	Pr--s9	Pronoun relative singular terminative
PS	Pr--sw	Pronoun relative singular essive
PS	Pr--s5	Pronoun relative singular abessive
PS	Pr--sk	Pronoun relative singular komitative
PSA	Pr--s7	Pronoun relative singular aditive
PSN	Pr--pn	Pronoun relative plural nominative
PSG	Pr--pg	Pronoun relative plural genitive
PS1	Pr--p1	Pronoun relative plural partitive
PSA	Pr--px	Pronoun relative plural illative
PSA	Pr--p2	Pronoun relative plural inessive
PSA	Pr--pe	Pronoun relative plural elative
PSA	Pr--pt	Pronoun relative plural allative
PSA	Pr--p3	Pronoun relative plural adessive
PSA	Pr--pb	Pronoun relative plural ablative
PS	Pr--p4	Pronoun relative plural translative
PS	Pr--p9	Pronoun relative plural terminative
PS	Pr--pw	Pronoun relative plural essive
PS	Pr--p5	Pronoun relative plural abessive
PS	Pr--pk	Pronoun relative plural komitative

PSX	Px	Pronoun reflexive
PSN	Px--sn	Pronoun reflexive singular nominative
PSG	Px--sg	Pronoun reflexive singular genitive
PS1	Px--s1	Pronoun reflexive singular partitive
PSA	Px--sx	Pronoun reflexive singular illative
PSA	Px--s2	Pronoun reflexive singular inessive
PSA	Px--se	Pronoun reflexive singular elative
PSA	Px--st	Pronoun reflexive singular allative
PSA	Px--s3	Pronoun reflexive singular adessive
PSA	Px--sb	Pronoun reflexive singular ablative
PS	Px--s4	Pronoun reflexive singular translative
PS	Px--s9	Pronoun reflexive singular terminative
PS	Px--sw	Pronoun reflexive singular essive
PS	Px--s5	Pronoun reflexive singular abessive
PS	Px--sk	Pronoun reflexive singular komitative
PSN	Px--pn	Pronoun reflexive plural nominative
PSG	Px--pg	Pronoun reflexive plural genitive
PS1	Px--p1	Pronoun reflexive plural partitive
PSA	Px--px	Pronoun reflexive plural illative
PSA	Px--p2	Pronoun reflexive plural inessive
PSA	Px--pe	Pronoun reflexive plural elative
PSA	Px--pt	Pronoun reflexive plural allative
PSA	Px--p3	Pronoun reflexive plural adessive
PSA	Px--pb	Pronoun reflexive plural ablative
PS	Px--p4	Pronoun reflexive plural translative
PS	Px--p9	Pronoun reflexive plural terminative
PS	Px--pw	Pronoun reflexive plural essive
PS	Px--p5	Pronoun reflexive plural abessive
PS	Px--pk	Pronoun reflexive plural komitative

PSG	Py--sg	Pronoun reciprocal singular genitive
PS1	Py--s1	Pronoun reciprocal singular partitive
PSA	Py--sx	Pronoun reciprocal singular illative

PSA	Py--s2	Pronoun reciprocal singular inessive
PSA	Py--se	Pronoun reciprocal singular elative
PSA	Py--st	Pronoun reciprocal singular allative
PSA	Py--s3	Pronoun reciprocal singular adessive
PSA	Py--sb	Pronoun reciprocal singular ablative
PS	Py--s4	Pronoun reciprocal singular translative
PS	Py--s9	Pronoun reciprocal singular terminative
PS	Py--sw	Pronoun reciprocal singular essive
PS	Py--s5	Pronoun reciprocal singular abessive
PS	Py--sk	Pronoun reciprocal singular komitative
PSA	Py--s7	Pronoun reciprocal singular aditive
PSG	Py--pg	Pronoun reciprocal plural genitive
PS1	Py--p1	Pronoun reciprocal plural partitive
PSA	Py--px	Pronoun reciprocal plural illative
PSA	Py--p2	Pronoun reciprocal plural inessive
PSA	Py--pe	Pronoun reciprocal plural elative
PSA	Py--pt	Pronoun reciprocal plural allative
PSA	Py--p3	Pronoun reciprocal plural adessive
PSA	Py--pb	Pronoun reciprocal plural ablative
PS	Py--p4	Pronoun reciprocal plural translative
PS	Py--p9	Pronoun reciprocal plural terminative
PS	Py--pw	Pronoun reciprocal plural essive
PS	Py--p5	Pronoun reciprocal plural abessive
PS	Py--pk	Pronoun reciprocal plural komitative

PSX	Pm	Pronoun determinal
PSN	Pm--sn	Pronoun determinal singular nominative
PSG	Pm--sg	Pronoun determinal singular genitive
PS1	Pm--s1	Pronoun determinal singular partitive
PSA	Pm--sx	Pronoun determinal singular illative
PSA	Pm--s2	Pronoun determinal singular inessive
PSA	Pm--se	Pronoun determinal singular elative
PSA	Pm--st	Pronoun determinal singular allative
PSA	Pm--s3	Pronoun determinal singular adessive
PSA	Pm--sb	Pronoun determinal singular ablative
PS	Pm--s4	Pronoun determinal singular translative
PS	Pm--s9	Pronoun determinal singular terminative
PS	Pm--sw	Pronoun determinal singular essive
PS	Pm--s5	Pronoun determinal singular abessive
PS	Pm--sk	Pronoun determinal singular komitative
PSA	Pm--s7	Pronoun determinal singular aditive
PSN	Pm--pn	Pronoun determinal plural nominative
PSG	Pm--pg	Pronoun determinal plural genitive
PS1	Pm--p1	Pronoun determinal plural partitive
PSA	Pm--px	Pronoun determinal plural illative
PSA	Pm--p2	Pronoun determinal plural inessive
PSA	Pm--pe	Pronoun determinal plural elative
PSA	Pm--pt	Pronoun determinal plural allative
PSA	Pm--p3	Pronoun determinal plural adessive
PSA	Pm--pb	Pronoun determinal plural ablative
PS	Pm--p4	Pronoun determinal plural translative
PS	Pm--p9	Pronoun determinal plural terminative
PS	Pm--pw	Pronoun determinal plural essive

PS	Pm--p5	Pronoun determinal plural abessive
PS	Pm--pk	Pronoun determinal plural komitative

4.3. Examples

Corpus tags	Lexicon	Examples
PP1SN	Pp1-sn	mina
PP1SG	Pp1-sg	minu
PP1S1	Pp1-s1	mind
PP1S	Pp1-sx	minusse
PP1SA	Pp1-s2	minus
PP1SA	Pp1-se	minust
PP1SA	Pp1-st	minule
PP1SA	Pp1-s3	minul
PP1SA	Pp1-sb	minult
PP1S	Pp1-s4	minuks
PP1S	Pp1-s9	minuni
PP1S	Pp1-sw	minuna
PP1S	Pp1-s5	minuta
PP1S	Pp1-sk	minuga
PP1SN	Pp1-pn	meie
PP1SG	Pp1-pg	meie
PP1S1	Pp1-p1	meid
PP1S	Pp1-px	meisse
PP1SA	Pp1-p2	meis
PP1SA	Pp1-pe	meist
PP1SA	Pp1-pt	meile
PP1SA	Pp1-p3	meil
PP1SA	Pp1-pb	meilt
PP1S	Pp1-p4	meieks
PP1S	Pp1-p9	meieni
PP1S	Pp1-pw	meiena
PP1S	Pp1-p5	meieta
PP1S	Pp1-pk	meiega
PP2SN	Pp2-sn	sina
PP2SG	Pp2-sg	sinu
PP2S1	Pp2-s1	sind
PP2S	Pp2-sx	sinusse
PP2SA	Pp2-s2	sinus
PP2SA	Pp2-se	sinust
PP2SA	Pp2-st	sinule
PP2SA	Pp2-s3	sinul
PP2SA	Pp2-sb	sinult
PP2S	Pp2-s4	sinuks
PP2S	Pp2-s9	sinuni
PP2S	Pp2-sw	sinuna
PP2S	Pp2-s5	sinuta
PP2S	Pp2-sk	sinuga
PP2SN	Pp2-pn	teie
PP2SG	Pp2-pg	teie

PP2S1	Pp2-p1	teid
PP2S	Pp2-px	teisse
PP2SA	Pp2-p2	teis
PP2SA	Pp2-pe	teist
PP2SA	Pp2-pt	teile
PP2SA	Pp2-p3	teil
PP2SA	Pp2-pb	teilt
PP2S	Pp2-p4	teieks
PP2S	Pp2-p9	teieni
PP2S	Pp2-pw	teiena
PP2S	Pp2-p5	teieta
PP2S	Pp2-pk	teiega
PP3SN	Pp3-sn	tema
PP3SG	Pp3-sg	tema
PP3S1	Pp3-s1	teda
PP3S	Pp3-sx	temasse
PP3SA	Pp3-s2	temas
PP3SA	Pp3-se	temast
PP3SA	Pp3-st	temale
PP3SA	Pp3-s3	temal
PP3SA	Pp3-sb	temalt
PP3S	Pp3-s4	temaks
PP3S	Pp3-s9	temani
PP3S	Pp3-sw	temana
PP3S	Pp3-s5	temata
PP3S	Pp3-sk	temaga
PP3SN	Pp3-pn	nemad
PP3SG	Pp3-pg	nende
PP3S1	Pp3-p1	neid
PP3S	Pp3-px	nendesse, neisse
PP3SA	Pp3-p2	nendes, neis
PP3SA	Pp3-pe	nendest, neist
PP3SA	Pp3-pt	nendele, neile
PP3SA	Pp3-p3	nendel, neil
PP3SA	Pp3-pb	nendelt, neilt
PP3S	Pp3-p4	nendeks, neiks
PP3S	Pp3-p9	nendeni
PP3S	Pp3-pw	nendena
PP3S	Pp3-p5	nendeta
PP3S	Pp3-pk	nendega

PSN	Pd--sn	selline
PSG	Pd--sg	sellise
PS1	Pd--s1	sellist
PSA	Pd--sx	sellisesse
PSA	Pd--s2	sellises
PSA	Pd--se	sellisest
PSA	Pd--st	sellisele
PSA	Pd--s3	sellisel
PSA	Pd--sb	selliselt
PS	Pd--s4	selliseks
PS	Pd--s9	selliseni
PS	Pd--sw	sellisena

PS	Pd--s5	selliseta
PS	Pd--sk	sellisega
PSA	Pd--s7	sellisse
PSN	Pd--pn	sellised
PSG	Pd--pg	selliste
PS1	Pd--p1	selliseid
PSA	Pd--px	sellistesse, selliseisse
PSA	Pd--p2	sellistes, selliseis
PSA	Pd--pe	sellistest, selliseist
PSA	Pd--pt	sellistele, selliseile
PSA	Pd--p3	sellistel, selliseil
PSA	Pd--pb	sellistelt, selliseilt
PS	Pd--p4	sellisteks, selliseiks
PS	Pd--p9	sellisteni, selliseini
PS	Pd--pw	sellistena, selliseina
PS	Pd--p5	sellisteta, selliseita
PS	Pd--pk	sellistega selliseiga

PSX	Pi	muist
PSN	Pi--sn	mingi
PSG	Pi--sg	mingi
PS1	Pi--s1	mingit
PSA	Pi--sx	mingisse
PSA	Pi--s2	mingis
PSA	Pi--se	mingist
PSA	Pi--st	mingile
PSA	Pi--s3	mingil
PSA	Pi--sb	mingilt
PS	Pi--s4	mingiks
PS	Pi--s9	mingini
PS	Pi--sw	mingina
PS	Pi--s5	mingita
PS	Pi--sk	mingiga
PSA	Pi--s7	mitmetaolisse
PSN	Pi--pn	mingid
PSG	Pi--pg	mingite
PS1	Pi--p1	mingeid
PSA	Pi--px	mingitesse, mingeisse
PSA	Pi--p2	mingites, mingeis
PSA	Pi--pe	mingitest, mingeist
PSA	Pi--pt	mingitele, mingeile
PSA	Pi--p3	mingitel, mingeil
PSA	Pi--pb	mingitelt, mingeilt
PS	Pi--p4	mingiteks, mingeiks
PS	Pi--p9	mingiteni, mingeini
PS	Pi--pw	mingitena, mingeina
PS	Pi--p5	mingiteta, mingeita
PS	Pi--pk	mingitega, mingeiga

PSX	Ps	oma
PSN	Ps--sn	iseenese
PSG	Ps--sg	iseenese
PS1	Ps--s1	iseennast

PSA	Ps--sx	iseenesesse
PSA	Ps--s2	iseeneses
PSA	Ps--se	iseenesest
PSA	Ps--st	iseenesele
PSA	Ps--s3	iseenesel
PSA	Ps--sb	iseeneselt
PS	Ps--s4	iseeneseks
PS	Ps--s9	iseeneseni
PS	Ps--sw	iseenesena
PS	Ps--s5	iseeneseta
PS	Ps--sk	iseenesega
PSN	Ps--pn	iseenese?
PSG	Ps--pg	iseeneste
PS1	Ps--p1	iseendid
PSA	Ps--px	iseenestesse
PSA	Ps--p2	iseenestes
PSA	Ps--pe	iseenestest
PSA	Ps--pt	iseenestele
PSA	Ps--p3	iseenestel
PSA	Ps--pb	iseenestelt
PS	Ps--p4	iseenesteks
PS	Ps--p9	iseenesteni
PS	Ps--pw	iseenestena
PS	Ps--p5	iseenesteta
PS	Ps--pk	iseenestega

PSN	Pq--sn	milline
PSG	Pq--sg	millise
PS1	Pq--s1	millist
PSA	Pq--sx	millisesse
PSA	Pq--s2	millises
PSA	Pq--se	millisest
PSA	Pq--st	millisele
PSA	Pq--s3	millisel
PSA	Pq--sb	milliselt
PS	Pq--s4	milliseks
PS	Pq--s9	milliseni
PS	Pq--sw	millisena
PS	Pq--s5	milliseta
PS	Pq--sk	millisega
PSA	Pq--s7	millisse?
PSN	Pq--pn	millised
PSG	Pq--pg	milliste
PS1	Pq--p1	milliseid
PSA	Pq--px	millistesse, milliseisse
PSA	Pq--p2	millistes, milliseis
PSA	Pq--pe	millistest, milliseist
PSA	Pq--pt	millistele, milliseile
PSA	Pq--p3	millistel, milliseil
PSA	Pq--pb	millistelt, milliseilt
PS	Pq--p4	millisteks, milliseiks
PS	Pq--p9	millisteni, milliseini
PS	Pq--pw	millistena, milliseina

PS	Pq--p5	millisteta, milliseita
PS	Pq--pk	millistega, milliseiga

PSN	Pr--sn	milline
PSG	Pr--sg	millise
PS1	Pr--s1	millist
PSA	Pr--sx	millisesse
PSA	Pr--s2	millises
PSA	Pr--se	millisest
PSA	Pr--st	millisele
PSA	Pr--s3	millisel
PSA	Pr--sb	milliselt
PS	Pr--s4	milliseks
PS	Pr--s9	milliseni
PS	Pr--sw	millisena
PS	Pr--s5	milliseta
PS	Pr--sk	millisega
PSA	Pr--s7	millisse?
PSN	Pr--pn	millised
PSG	Pr--pg	milliste
PS1	Pr--p1	milliseid
PSA	Pr--px	millistesse, milliseisse
PSA	Pr--p2	millistes, milliseis
PSA	Pr--pe	millistest, milliseist
PSA	Pr--pt	millistele, milliseile
PSA	Pr--p3	millistel, milliseil
PSA	Pr--pb	millistelt, milliseilt
PS	Pr--p4	millisteks, milliseiks
PS	Pr--p9	millisteni, milliseini
PS	Pr--pw	millistena, milliseina
PS	Pr--p5	millisteta, milliseita
PS	Pr--pk	millistega, milliseiga

PSX	Px	oma
PSN	Px--sn	ise
PSG	Px--sg	iseenda
PS1	Px--s1	iseend
PSA	Px--sx	iseendasse
PSA	Px--s2	iseendas
PSA	Px--se	iseendast
PSA	Px--st	iseendale
PSA	Px--s3	iseendal
PSA	Px--sb	iseendalt
PS	Px--s4	iseendaks
PS	Px--s9	iseendani
PS	Px--sw	iseendana
PS	Px--s5	iseendata
PS	Px--sk	iseendaga
PSN	Px--pn	ise
PSG	Px--pg	iseendi
PS1	Px--p1	iseendid
PSA	Px--px	iseendisse
PSA	Px--p2	iseendis

```
PSA     Px--pe  iseendist
PSA     Px--pt  iseendile
PSA     Px--p3  iseendil
PSA     Px--pb  iseendilt
PS      Px--p4  iseendiks
PS      Px--p9  iseendini
PS      Px--pw  iseendina
PS      Px--p5  iseendita
PS      Px--pk  iseendiga

PSG     Py--sg  teineteise
PS1     Py--s1  teineteist
PSA     Py--sx  teineteisesse
PSA     Py--s2  teineteises
PSA     Py--se  teineteisest
PSA     Py--st  teineteisele
PSA     Py--s3  teineteisel
PSA     Py--sb  teineteiselt
PS      Py--s4  teineteiseks
PS      Py--s9  teineteiseni
PS      Py--sw  teineteisena
PS      Py--s5  teineteiseta
PS      Py--sk  teineteisega
PSA     Py--s7  teineteise
PSG     Py--pg  teineteiste
PS1     Py--p1  teineteisi
PSA     Py--px  teineteistesse
PSA     Py--p2  teineteistes
PSA     Py--pe  teineteistest
PSA     Py--pt  teineteistele
PSA     Py--p3  teineteistel
PSA     Py--pb  teineteistelt
PS      Py--p4  teineteisteks
PS      Py--p9  teineteisteni
PS      Py--pw  teineteistena
PS      Py--p5  teineteisteta
PS      Py--pk  teineteistega

PSX     Pm      ise
PSN     Pm--sn  ise
PSG     Pm--sg  enda
PS1     Pm--s1  end
PSA     Pm--sx  endasse
PSA     Pm--s2  endas
PSA     Pm--se  endast
PSA     Pm--st  endale
PSA     Pm--s3  endal
PSA     Pm--sb  endalt
PS      Pm--s4  endaks
PS      Pm--s9  endani
PS      Pm--sw  endana
PS      Pm--s5  endata
PS      Pm--sk  endaga
```



```
PSA     Pm--s7  emba-kumba
PSNPm--pn       ise
PSG     Pm--pg  endi
PS1     Pm--p1  endid
PSA     Pm--px  endisse
PSA     Pm--p2  endis
PSA     Pm--pe  endist
PSA     Pm--pt  endile
PSA     Pm--p3  endil
PSA     Pm--pb  endilt
PS      Pm--p4  endiks
PS      Pm--p9  endini
PS      Pm--pw  endina
PS      Pm--p5  endita
PS      Pm--pk  endiga
```

9.5 Determiners (D)

Not applicable.

9.6 Atricles (T)

Not applicable.

9.7 Adverbs (R)

7.1 Lexicon

```
= ============== ============== = ============
P ATT            VAL            C EXAMPLE
= ============== ============== = ============
1 Type                          - asjatult
- -------------- -------------- - ------------
2 Degree                        -
**********************************************
3 Clitic                        -
- -------------- -------------- - ------------
4 Number                        -
- -------------- -------------- - ------------
```

```
5 Person                        -
=============================== ============
```

7.2. Definitions

```
Corpus tags       Lexicon       Definitions
----------------------------------------------
RR      R       Adverb
```

7.3. Examples

```
Corpus tags      Lexicon       Examples
---------------------------------------------
RR      R       asjatult
```

9.8 Adpositions (S)

8.1. Lexicon

```
= ============= ============= = ============
P ATT           VAL           C EXAMPLE
= ============= ============= = ============
1 Type          preposition   p enne
                postposition  t kaudu
- ------------- ------------- - ------------
2 Formation                   -
**********************************************
3 Case                        -
- ------------- ------------- - ------------
4 Clitic                      -
=============================== ============
```

8.2. Definitions

```
Corpus tags       Lexicon       Definitions
---------------------------------------------
SP      Sp      Adposition preposition
ST      St      Adposition postposition
```

8.3. Examples

```
Corpus tags      Lexicon       Examples
---------------------------------------------
```



```
SP      Sp      enne
ST      St      kaudu
```

9.9 Conjunctions (C)

9.1. Lexicon

```
= ============= ============= = ============
P ATT           VAL           C EXAMPLE
= ============= ============= = ============
1 Type          coordinating  c ja
                subordinating s et
**********************************************
2 Formation                   -
- ------------- ------------- - ------------
3 Coord_Type                  -
- ------------- ------------- - ------------
4 Sub_Type                    -
- ------------- ------------- - ------------
5 Clitic                      -
- ------------- ------------- - ------------
6 Number                      -
- ------------- ------------- - ------------
7 Person                      -
=============================== ============
```

9.2. Definitions

```
Corpus tags       Lexicon       Definitions
----------------------------------------------
CC      Cc      Conjuction coordinating
CS      Cs      Conjuction subordinating
```

9.3. Examples

```
Corpus tags      Lexicon       Examples
--------------------------------------------
CC      Cc      ja
CS      Cs      et
```

9.10 Numerals (M)

10.1. Lexicon

```
= ============== ============== = ============
P ATT            VAL            C EXAMPLE
= ============== ============== = ============
1 Type           cardinal       c kaheksa
                 ordinal        o kaheksas
- -------------- -------------- - ------------
2 Gender                        -
- -------------- -------------- - ------------
3 Number         singular       s kaheksa
                 plural         p kaheksad
- -------------- -------------- - ------------
4 Case           nominative     n kaheksa
                 genitive       g kaheksa
           l.s.  partitive      1 kaheksat
                 illative       x kaheksasse
                 inessive       2 kaheksas
                 elative        e kaheksast
                 allative       t kaheksale
                 adessive       3 kaheksal
                 ablative       b kaheksalt
           l.s.  translative    4 kaheksaks
                 terminative    9 kaheksani
                 essive         w kaheksana
           l.s.  abessive       5 kaheksata
           l.s.  komitative     k kaheksaga
           l.s.  aditive        7 viite
********************************* ------------
5 Form           digit          d 1984
                 roman          r IX
                 letter         l kaheksa
- -------------- -------------- - ------------
6 Definiteness                  -
- -------------- -------------- - ------------
7 Clitic                        -
- -------------- -------------- - ------------
8 Class                         -
- -------------- -------------- - ------------
9 Animate                       -
- -------------- -------------- - ------------
10Owner_Number                  -
- -------------- -------------- - ------------
11Owner_Person                  -
- -------------- -------------- - ------------
12Owned_Number                  -
================================= ============
```

10.2. Definitions

```
Corpus tags      Lexicon       Definitions
------------------------------------------------
```



```
MCSX    Mc---d  Numeral cardinal digit
MCSN    Mc-snl  Numeral cardinal singular nominative letter
MCSG    Mc-sgl  Numeral cardinal singular genitive letter
MCS1    Mc-s1l  Numeral cardinal singular partitive letter
MCSA    Mc-sxl  Numeral cardinal singular illative letter
MCSA    Mc-s2l  Numeral cardinal singular inessive letter
MCSA    Mc-sel  Numeral cardinal singular elative letter
MCSA    Mc-stl  Numeral cardinal singular allative letter
MCSA    Mc-s3l  Numeral cardinal singular adessive letter
MCSA    Mc-sbl  Numeral cardinal singular ablative letter
MCS     Mc-s4l  Numeral cardinal singular translative letter
MCS     Mc-s9l  Numeral cardinal singular terminative letter
MCS     Mc-swl  Numeral cardinal singular essive letter
MCS     Mc-s5l  Numeral cardinal singular abessive letter
MCS     Mc-skl  Numeral cardinal singular komitative letter
MCSA    Mc-s7l  Numeral cardinal singular aditive letter
MCS     Mc-pnl  Numeral cardinal plural nominative letter
MCS     Mc-pgl  Numeral cardinal plural genitive letter
MCS     Mc-p1l  Numeral cardinal plural partitive letter
MCSA    Mc-pxl  Numeral cardinal plural illative letter
MCSA    Mc-p2l  Numeral cardinal plural inessive letter
MCSA    Mc-pel  Numeral cardinal plural elative letter
MCSA    Mc-ptl  Numeral cardinal plural allative letter
MCSA    Mc-p3l  Numeral cardinal plural adessive letter
MCSA    Mc-pbl  Numeral cardinal plural ablative letter
MCS     Mc-p4l  Numeral cardinal plural translative letter
MCS     Mc-p9l  Numeral cardinal plural terminative letter
MCS     Mc-pwl  Numeral cardinal plural essive letter
MCS     Mc-p5l  Numeral cardinal plural abessive letter
MCS     Mc-pkl  Numeral cardinal plural komitative letter

MOSX    Mo---d  Numeral ordinal digit
MOSX    Mo---r  Numeral ordinal roman
MOSN    Mo-snl  Numeral ordinal singular nominative letter
MOSG    Mo-sgl  Numeral ordinal singular genitive letter
MOS1    Mo-s1l  Numeral ordinal singular partitive letter
MOSA    Mo-sxl  Numeral ordinal singular illative letter
MOSA    Mo-s2l  Numeral ordinal singular inessive letter
MOSA    Mo-sel  Numeral ordinal singular elative letter
MOSA    Mo-stl  Numeral ordinal singular allative letter
MOSA    Mo-s3l  Numeral ordinal singular adessive letter
MOSA    Mo-sbl  Numeral ordinal singular ablative letter
MOS     Mo-s4l  Numeral ordinal singular translative letter
MOS     Mo-s9l  Numeral ordinal singular terminative letter
MOS     Mo-swl  Numeral ordinal singular essive letter
MOS     Mo-s5l  Numeral ordinal singular abessive letter
MOS     Mo-skl  Numeral ordinal singular komitative letter
MOSA    Mo-s7l  Numeral ordinal singular aditive letter
MOS     Mo-pnl  Numeral ordinal plural nominative letter
MOS     Mo-pgl  Numeral ordinal plural genitive letter
MOS     Mo-p1l  Numeral ordinal plural partitive letter
MOSA    Mo-pxl  Numeral ordinal plural illative letter
MOSA    Mo-p2l  Numeral ordinal plural inessive letter
```

MOSA	Mo-pel	Numeral ordinal plural elative letter
MOSA	Mo-ptl	Numeral ordinal plural allative letter
MOSA	Mo-p3l	Numeral ordinal plural adessive letter
MOSA	Mo-pbl	Numeral ordinal plural ablative letter
MOS	Mo-p4l	Numeral ordinal plural translative letter
MOS	Mo-p9l	Numeral ordinal plural terminative letter
MOS	Mo-pwl	Numeral ordinal plural essive letter
MOS	Mo-p5l	Numeral ordinal plural abessive letter
MOS	Mo-pkl	Numeral ordinal plural komitative letter

10.3. Examples

Corpus tags	Lexicon	Examples
MCSX	Mc---d	8
MCSN	Mc-snl	kaheksa
MCSG	Mc-sgl	kaheksa
MCS1	Mc-s1l	kaheksat
MCSA	Mc-sxl	kaheksasse
MCSA	Mc-s2l	kaheksas
MCSA	Mc-sel	kaheksast
MCSA	Mc-stl	kaheksale
MCSA	Mc-s3l	kaheksal
MCSA	Mc-sbl	kaheksalt
MCS	Mc-s4l	kaheksaks
MCS	Mc-s9l	kaheksani
MCS	Mc-swl	kaheksana
MCS	Mc-s5l	kaheksata
MCS	Mc-skl	kaheksaga
MCSA	Mc-s7l	viide
MCS	Mc-pnl	kaheksad
MCS	Mc-pgl	kaheksate
MCS	Mc-p1l	kaheksaid
MCSA	Mc-pxl	kaheksatesse, kaheksaisse
MCSA	Mc-p2l	kaheksates, kaheksais
MCSA	Mc-pel	kaheksatest, kaheksaist
MCSA	Mc-ptl	kaheksatele, kaheksaile
MCSA	Mc-p3l	kaheksatel, kaheksail
MCSA	Mc-pbl	kaheksatelt, kaheksailt
MCS	Mc-p4l	kaheksateks, kaheksaiks
MCS	Mc-p9l	kaheksateni, kaheksaini
MCS	Mc-pwl	kaheksatena, kaheksaina
MCS	Mc-p5l	kaheksateta
MCS	Mc-pkl	kaheksatega
MOSX	Mo---d	8.
MOSX	Mo---r	IX
MOSN	Mo-snl	kaheksas
MOSG	Mo-sgl	kaheksanda
MOS1	Mo-s1l	kaheksandat
MOSA	Mo-sxl	kaheksandasse
MOSA	Mo-s2l	kaheksandas

MOSA	Mo-sel	kaheksandast
MOSA	Mo-stl	kaheksandale
MOSA	Mo-s3l	kaheksandal
MOSA	Mo-sbl	kaheksandalt
MOS	Mo-s4l	kaheksandaks
MOS	Mo-s9l	kaheksandani
MOS	Mo-swl	kaheksandana
MOS	Mo-s5l	kaheksandata
MOS	Mo-skl	kaheksandaga
MOSA	Mo-s7l	teise
MOS	Mo-pnl	kaheksandad
MOS	Mo-pgl	kaheksandate
MOS	Mo-p1l	kaheksandaid
MOSA	Mo-pxl	kaheksandatesse, kaheksandaisse
MOSA	Mo-p2l	kaheksandates, kaheksandais
MOSA	Mo-pel	kaheksandatest, kaheksandaist
MOSA	Mo-ptl	kaheksandatele, kaheksandaile
MOSA	Mo-p3l	kaheksandatel, kaheksandail
MOSA	Mo-pbl	kaheksandatelt, kaheksandailt
MOS	Mo-p4l	kaheksandateks, kaheksandaiks
MOS	Mo-p9l	kaheksandateni, kaheksandaini
MOS	Mo-pwl	kaheksandatena, kaheksandaina
MOS	Mo-p5l	kaheksandateta
MOS	Mo-pkl	kaheksandatega

9.11 Interjections (I)

11.1. Lexicon

P	ATT	VAL	C	EXAMPLE
1	Type		-	oi
2	Formation		-	

11.2. Definitions

Corpus tags	Lexicon	Definitions
II	I	Interjection

11.3. Examples

Corpus tags	Lexicon	Examples

```
---------------------------------------
II      I       oi
```

9.12 Residual (X)

12.1. Lexicon

```
= ============== ============== =
P ATT            VAL            C
= ============== ============== =
                                -
=================================
```

13.2. Definitions

```
Corpus tags      Lexicon       Definitions
------------------------------------------------
X       X       foreign word
```

13.2. Examples

```
Corpus tags     Lexicon       Examples
---------------------------------------
X       X       qwerty
```

9.13 Abreviations (Y)

13.1. Lexicon

```
= ============== ============== = ============
P ATT            VAL            C
= ============== ============== = ============
1 Syntactic_Type nominal        n CD
                 verbal         v vt
                 adjectival     a hisp
                 adverbial      r jne
- ------------------------------ ------------
2 Gender                        -
- -------------- -------------- - ------------
3 Number         singular       s CD
                 plural         p CDd
```



```
- -------------- -------------- - ------------
4 Case     l.s.  nominative     n CD
           l.s.  genitive       g CD
           l.s.  partitive      1 CDd
           l.s.  illative       x CDsse
           l.s.  inessive       2 CDs
           l.s.  elative        e CDst
           l.s.  allative       t CDle
           l.s.  adessive       3 CDl
           l.s.  ablative       b CDlt
           l.s.  translative    4 CDks
           l.s.  terminative    9 CDni
           l.s.  essive         w CDna
           l.s.  abessive       5 CDta
           l.s.  komitative     k CDga
           l.s.  aditive        7
- -------------- -------------- - ------------
5 Definiteness                  -
================================ ============
```

13.2. Definitions

```
Corpus tags      Lexicon       Definitions
------------------------------------------------
YSX     Yn      Abbreviation nominal
YSN     Yn-sn   Abbreviation nominal singular nominative
YSG     Yn-sg   Abbreviation nominal singular genitive
YS1     Yn-s1   Abbreviation nominal singular partitive
YSA     Yn-sx   Abbreviation nominal singular illative
YSA     Yn-s2   Abbreviation nominal singular inessive
YSA     Yn-se   Abbreviation nominal singular elative
YSA     Yn-st   Abbreviation nominal singular allative
YSA     Yn-s3   Abbreviation nominal singular adessive
YSA     Yn-sb   Abbreviation nominal singular ablative
YS      Yn-s4   Abbreviation nominal singular translative
YS      Yn-s9   Abbreviation nominal singular terminative
YS      Yn-sw   Abbreviation nominal singular essive
YS      Yn-s5   Abbreviation nominal singular abessive
YS      Yn-sk   Abbreviation nominal singular komitative
YS      Yn-s7   Abbreviation nominal singular aditive
YS      Yn-pn   Abbreviation nominal plural nominative
YS      Yn-pg   Abbreviation nominal plural genitive
YS      Yn-p1   Abbreviation nominal plural partitive
YSA     Yn-px   Abbreviation nominal plural illative
YSA     Yn-p2   Abbreviation nominal plural inessive
YSA     Yn-pe   Abbreviation nominal plural elative
YSA     Yn-pt   Abbreviation nominal plural allative
YSA     Yn-p3   Abbreviation nominal plural adessive
YSA     Yn-pb   Abbreviation nominal plural ablative
YS      Yn-p4   Abbreviation nominal plural translative
YS      Yn-p9   Abbreviation nominal plural terminative
YS      Yn-pw   Abbreviation nominal plural essive
```

```
YS      Yn-p5   Abbreviation nominal plural abessive
YS      Yn-pk   Abbreviation nominal plural komitative

YSX     Ya      Abbreviation adjectival

YSX     Yr      Abbreviation adverbial

YSX     Yv      Abbreviation verbal


13.3. Examples

Corpus tags      Lexicon       Examples
----------------------------------
YSX     Yn      A
YSN     Yn-sn   CD
YSG     Yn-sg   CD
YS1     Yn-s1   CDd
YSA     Yn-sx   CDsse
YSA     Yn-s2   CDs
YSA     Yn-se   CDst
YSA     Yn-st   CDle
YSA     Yn-s3   CDl
YSA     Yn-sb   CDlt
YS      Yn-s4   CDks
YS      Yn-s9   CDni
YS      Yn-sw   CDna
YS      Yn-s5   CDta
YS      Yn-sk   CDga
YS      Yn-s7   RASi
YS      Yn-pn   CDd
YS      Yn-pg   CDde
YS      Yn-p1   CDsid
YSA     Yn-px   CDdesse
YSA     Yn-p2   CDdes
YSA     Yn-pe   CDdest
YSA     Yn-pt   CDdele
YSA     Yn-p3   CDdel
YSA     Yn-pb   CDdelt
YS      Yn-p4   CDdeks
YS      Yn-p9   CDdeni
YS      Yn-pw   CDdena
YS      Yn-p5   CDdeta
YS      Yn-pk   CDdega

YSX     Ya      hisp

YSX     Yr      jne

YSX     Yv      vt
```


9.14 Particles (Q)

Not applicable.

Chapter 10

Application to Hungarian

Authors:
László Tihanyi, Tamás Váradi, Csaba Oravecz.

10.1 Noun (N)

```
= ============== ============== =
P ATT            VAL            C
= ============== ============== =
1 Type           common         c
                 proper         p
- -------------- -------------- -
2 Gender                        -
- -------------- -------------- -
3 Number         singular       s
                 plural         p
- -------------- -------------- -
4 Case           nominative     n
                 genitive       g
                 dative         d
                 accusative     a
                 instrumental   i
                 illative       x
                 inessive       2
                 elative        e
                 allative       t
                 adessive       3
                 ablative       b
                 terminative    9
                 essive         w
           l.s.  temporalis     m
           l.s.  causalis       c
           l.s.  sublative      s
           l.s.  delative       h
           l.s.  sociative      q
           l.s.  factive        y
```



```
           l.s.  superessive    p
           l.s.  distributive   u
* ***************************** *
5 Definiteness                  -
- -------------- -------------- -
6 Clitic                        -
- -------------- -------------- -
7 Animate        no             n
                 yes            y
- -------------- -------------- -
8 Owner_Number   singular       s
                 plural         p
- -------------- -------------- -
9 Owner_Person   first          1
                 second         2
                 third          3
---------------- -------------- -
10Owned_Number   singular       s
                 plural         p
=================================
```

```
Notes:

1. Gender: Not applicable to Hungarian.

2. Numbers:
   Hungarian has three types of number in the nominal inflection:
   1. The number of the noun.
   2. The number of owners that own the noun.
   3. The number of the context given referent, which is some possession
      of the noun, i.e. belongs to the noun (anaphoric possessive).

3. Genitive is rarely marked in Hungarian. If marked then with the same
   suffix as that of dative case.
   Nouns with zero suffix can be nominative or genitive, so they are
   ambigious.

4. Common Hungarian nouns can have
   2(Number)*7(OwnerPerson,OwnerNumber)*3(OwnedNumber)*22(Case)=1324
   different forms.

5. The usage of -szerte[SZERTE] meaning 'many places around' is restricted
   so we do not take it as a regular case ending. The same stands for
   '-lag/-leg' marked with [LAG], e.g. 'házilag' means (made) at home.


Combinations:

0   1    3    4                        7     8        9         10
--- ---- ---- ------------------------ ----  -------- --------- --------
Pos Type Num  Case                     Anim  OwnerNum OwnerPers OwnedNum
--- ---- ---- ------------------------ ----  -------- --------- --------
```

```
 N  [cp] [sp] [ngdaix2et3b9wmcshqypu] [yn]  [sp]     [123]     [sp]
```

Examples on combinations:

a) Combinations on Number, OwnerNumber, OwnerPerson and OwnedNumber:

01234567890		
Nc-sn--n---	asztal[N]	table
Nc-sn--n--s	asztal[N]+é[POS]	thing of the table
Nc-sn--n--p	asztal[N]+éi[POSi]	things of the table
Nc-sn--ns1-	asztal[N]+om[PSe1]	my table
Nc-sn--ns1s	asztal[N]+om[PSe1]+é[POS]	thing of my table
Nc-sn--ns1p	asztal[N]+om[PSe1]+éi[POSi]	things of my table
Nc-sn--ns2-	asztal[N]+od[PSe2]	your table
Nc-sn--ns2s	asztal[N]+od[PSe2]+é[POS]	thing of your table
Nc-sn--ns2p	asztal[N]+od[PSe2]+éi[POSi]	things of your table
Nc-sn--ns3-	asztal[N]+a[PSe3]	his/her table
Nc-sn--ns3s	asztal[N]+á[PSe3]+é[POS]	thing of his/her table
Nc-sn--ns3p	asztal[N]+á[PSe3]+éi[POSi]	things of his/her table
Nc-sn--np1-	asztal[N]+unk[PSt1]	our table
Nc-sn--np1s	asztal[N]+unk[PSt1]+é[POS]	thing of our table
Nc-sn--np1p	asztal[N]+unk[PSt1]+éi[POSi]	things of our table
Nc-sn--np2-	asztal[N]+otok[PSt2]	your table
Nc-sn--np2s	asztal[N]+otok[PSt2]+é[POS]	thing of your table
Nc-sn--np2p	asztal[N]+otok[PSt2]+éi[POSi]	things of your table
Nc-sn--np3-	asztal[N]+uk[PSt2]	their table
Nc-sn--np3s	asztal[N]+uk[PSt2]+é[POS]	thing of their table
Nc-sn--np3p	asztal[N]+uk[PSt2]+éi[POSi]	things of their table
Nc-pn--n---	asztal[N]+ok[PL]	tables
Nc-pn--n--s	asztal[N]+ok[PL]+é[POS]	thing of the tables
Nc-pn--n--p	asztal[N]+ok[PL]+éi[POSi]	things of the tables
Nc-pn--ns1-	asztal[N]+aim[PSe1i]	my tables
Nc-pn--ns1s	asztal[N]+aim[PSe1i]+é[POS]	thing of my tables
Nc-pn--ns1p	asztal[N]+aim[PSe1i]+éi[POSi]	things of my tables
Nc-pn--ns2-	asztal[N]+aid[PSe2i]	your tables
Nc-pn--ns2s	asztal[N]+aid[PSe2i]+é[POS]	thing of your tables
Nc-pn--ns2p	asztal[N]+aid[PSe2i]+éi[POSi]	things of your tables
Nc-pn--ns3-	asztal[N]+ai[PSe3i]	his/her tables
Nc-pn--ns3s	asztal[N]+ai[PSe3i]+é[POS]	thing of his/her tables
Nc-pn--ns3p	asztal[N]+ai[PSe3i]+éi[POSi]	things of his/her tables
Nc-pn--np1-	asztal[N]+aink[PSt1i]	our tables
Nc-pn--np1s	asztal[N]+aink[PSt1i]+é[POS]	thing of our tables
Nc-pn--np1p	asztal[N]+aink[PSt1i]+éi[POSi]	things of our tables
Nc-pn--np2-	asztal[N]+aitok[PSt2i]	your tables
Nc-pn--np2s	asztal[N]+aitok[PSt2i]+é[POS]	thing of your tables
Nc-pn--np2p	asztal[N]+aitok[PSt2i]+éi[POSi]	things of your tables
Nc-pn--np3-	asztal[N]+aik[PSt3i]	their tables
Nc-pn--np3s	asztal[N]+aik[PSt3i]+é[POS]	thing of their tables
Nc-pn--np3p	asztal[N]+aik[PSt3i]+éi[POSi]	things of their tables

b) Combinations on Case:

Category: 01234567890	Case:	Example analysis:	
Nc-sn------	nominative	asztal[N]	The table is new.
Nc-sg------	genitive	asztal[N]+nak[GEN]	The leg of the table is red.
Nc-sd------	dative	asztal[N]+nak[DAT]	It gives a new look to the table.
Nc-sa------	accusative	asztal[N]+t[ACC]	I see the table.
Nc-si------	instrumental	asztal[N]+lal[INS]	Do something with the table.
Nc-sx------	illative	asztal[N]+ba[ILL]	She put it into the table.
Nc-s2------	inessive	asztal[N]+ban[INE]	He keeps it in this table.
Nc-se------	elative	asztal[N]+ból[ELA]	She took it out from this table.
Nc-st------	allative	asztal[N]+hoz[ALL]	Go to the table.
Nc-s3------	adessive	asztal[N]+nál[ADE]	At the table there is a chair.
Nc-sb------	ablative	asztal[N]+tól[ABL]	She came from the table.
Nc-s9------	terminative	asztal[N]+ig[TER]	Go as far as the table.
Nc-sw------	essive	asztal[N]+ul[ESS]	The plate served us as a table.
Nc-sm------	temporalis	hat[N]+kor[TEM]	We arrived at six.
Nc-sc------	causalis	asztal[N]+ért[CAU]	We do it for the table.
Nc-ss------	sublative	asztal[N]+ra[SUB]	Put it onto the table.
Nc-sh------	delative	asztal[N]+ról[DEL]	Talk about the table.
Nc-sq------	sociative	asztal[N]+ostul[SOC]	It is sold together with the table.
Nc-sy------	factive	asztal[N]+lá[FAC]	Soon it became a table.
Nc-sp------	superessive	asztal[N]+on[SUP]	The cat sits on the table.
Nc-su------	distributive	asztal[N]+onként[DIS]	We collected 10 forints in each table.

10.2 Verb (V)

P	ATT	VAL	C
1	Type	main	m
		auxiliary	a
2	VForm	indicative	i
		imperative	m
		conditional	c
		infinitive	n
3	Tense	present	p
		past	s
4	Person	first	1
		second	2
		third	3
5	Number	singular	s
		plural	p
6	Gender		-

```
********************************
7 Voice                        -
- -------------- ------------- -
8 Negative                     -
- -------------- ------------- -
9 Definiteness   no            n
                 yes           y
           l.s.  1s2s          2
- -------------- ------------- -
10Clitic                       -
- -------------- ------------- -
11Case                         -
- -------------- ------------- -
12Animate                      -
- -------------- ------------- -
13Clitic_s                     -
================================
```

Notes:

1. 1s2s is a special form for definitness, in which the speaker's person is first singular (I) and the target of the transitivity is second singular (you).

2. A Hungarian verb has
   3(Person)*2(Number)*4(Present indicative, Present imperativ,
   Present conditional,Past indicative)*2(Transitivity)
   +4(1s2s)+7(Infinitive)=59 different forms.

Combinations:

```
--- ---- ----- ----- ------ ------ -----------
Pos Type VForm Tense Person Number Definitness
--- ---- ----- ----- ------ ------ -----------
 V   m   i     [ps] [123]   [sp]   [yn]
 V   m   c     p    [123]   [sp]   [yn]
 V   m   m     p    [123]   [sp]   [yn]
 V   m   i     [ps] 1       s      2
 V   m   [cm]  p    1       s      2
 V   m   n     -    -       -      -
 V   m   n     p    [123]   [sp]   -
 V   a   i     p    [123]   [sp]   n
--- ---- ----- ----- ------ ------ -----------
```

Examples on combinations:

```
01234567890123
Vmip1s------n-   tanul[V]+ok[e1]                I learn (a)
Vmip2s------n-   tanul[V]+sz[e2]                you learn (a)
Vmip3s------n-   tanul[V]                       she learns (a)
```



```
Vmip1p------n-   tanul[V]+unk[t1]           we learn (a)
Vmip2p------n-   tanul[V]+tok[t2]           you learn  (a)
Vmip3p------n-   tanul[V]+nak[t3]           they learn (a)
Vmip1s------y-   tanul[V]+om[Te1]           I learn (the)
Vmip2s------y-   tanul[V]+od[Te2]           you learn (the)
Vmip3s------y-   tanul[V]+ja[Te3]           she learns (the)
Vmip1p------y-   tanul[V]+juk[Tt1]          we learn (the)
Vmip2p------y-   tanul[V]+játok[Tt2]        you learn  (the)
Vmip3p------y-   tanul[V]+ják[Tt3]          they learn (the)
Vmis1s------n-   tanul[V]+tam[Me1]          I learnt (a)
Vmis2s------n-   tanul[V]+tál[Me2]          you learnt (a)
Vmis3s------n-   tanul[V]+t[Me3]            she learnt (a)
Vmis1p------n-   tanul[V]+tunk[Mt1]         we learnt (a)
Vmis2p------n-   tanul[V]+tatok[Mt2]        you learnt  (a)
Vmis3p------n-   tanul[V]+tak[Mt3]          they learnt (a)
Vmis1s------y-   tanul[V]+tam[TMe1]         I learnt (the)
Vmis2s------y-   tanul[V]+tad[TMe2]         you learnt (the)
Vmis3s------y-   tanul[V]+ta[TMe3]          she learnt (the)
Vmis1p------y-   tanul[V]+tuk[TMt1]         we learnt (the)
Vmis2p------y-   tanul[V]+tátok[TMt2]       you learnt  (the)
Vmis3p------y-   tanul[V]+ták[TMt3]         they learnt (the)

Vmcp1s------n-   tanul[V]+nék[Fe1]          (if) I learnt (a)
Vmcp2s------n-   tanul[V]+nál[Fe2]          (if) you learnt (a)
Vmcp3s------n-   tanul[V]+na[Fe3]           (if) she learnt (a)
Vmcp1p------n-   tanul[V]+nánk[Ft1]         (if) we learnt (a)
Vmcp2p------n-   tanul[V]+nátok[Ft2]        (if) you learnt  (a)
Vmcp3p------n-   tanul[V]+nának[Ft3]        (if) they learnt (a)
Vmcp1s------y-   tanul[V]+nám[TFe1]         (if) I learnt (the)
Vmcp2s------y-   tanul[V]+nád[TFe2]         (if) you learnt (the)
Vmcp3s------y-   tanul[V]+ná[TFe3]          (if) she learnt (the)
Vmcp1p------y-   tanul[V]+nánk[TFt1]        (if) we learnt (the)
Vmcp2p------y-   tanul[V]+nátok[TFt2]       (if) you learnt  (the)
Vmcp3p------y-   tanul[V]+nák[TFt3]         (if) they learnt (the)

Vmmp1s------n-   tanul[V]+jak[Pe1]          (let) me learn (a)
Vmmp2s------n-   tanul[V]+jál[Pe2]          (let) you learn (a)
Vmmp3s------n-   tanul[V]+jon[Pe3]          (let) she learn (a)
Vmmp1p------n-   tanul[V]+junk[Pt1]         (let) we learn (a)
Vmmp2p------n-   tanul[V]+jatok[Pt2]        (let) you learn  (a)
Vmmp3p------n-   tanul[V]+janak[Pt3]        (let) they learn (a)
Vmmp1s------y-   tanul[V]+jam[TPe1]         (let) me learn (the)
Vmmp2s------y-   tanul[V]+jad[TPe2]         (let) you learn (the)
Vmmp3s------y-   tanul[V]+ja[TPe3]          (let) she learn (the)
Vmmp1p------y-   tanul[V]+juk[TPt1]         (let) we learn (the)
Vmmp2p------y-   tanul[V]+játok[TPt2]       (let) you learn  (the)
Vmmp3p------y-   tanul[V]+ják[TPt3]         (let) they learn (the)

Vmip1s------2-   tanul[V]+lak[Ie1]          I learn you
Vmis1s------2-   tanul[V]+talak[IMe1]       I learnt you
Vmcp1s------2-   tanul[V]+nálak[IFe1]       (if) I learnt you
Vmmp1s------2-   tanul[V]+jalak[IPe1]       (let) me learn you
```

```
Vmn-----------   tanul[V]+ni[INF]              to learn
Vmnp1s--------   tanul[V]+nom[INRe1]           for me to learn
Vmnp2s--------   tanul[V]+nod[INRe2]           for you to learn
Vmnp3s--------   tanul[V]+nia[INRe3]           for her to learn
Vmnp1p--------   tanul[V]+nunk[INRt1]          for us to learn
Vmnp2p--------   tanul[V]+notok[INRt2]         for you to learn
Vmnp3p--------   tanul[V]+niuk[INRt3]          for them to learn
Vaip1s--------   fog[V]+ok[e1]                 I shall
```

10.3 Adjective (A)

```
= ============== ============== =
P ATT            VAL            C
= ============== ============== =
1 Type           qualificative  f
- -------------- -------------- -
2 Degree         positive       p
                 comparative    c
                 superlative    s
- -------------- -------------- -
3 Gender                        -
- -------------- -------------- -
4 Number         singular       s
                 plural         p
- -------------- -------------- -
5 Case           nominative     n
                 genitive       g
                 dative         d
                 accusative     a
                 instrumental   i
                 illative       x
                 inessive       2
                 elative        e
                 allative       t
                 adessive       3
                 ablative       b
                 terminative    9
                 essive         w
            l.s. temporalis     m
            l.s. causalis       c
            l.s. sublative      s
            l.s. delative       h
            l.s. sociative      q
            l.s. factive        y
            l.s. superessive    p
            l.s. distributive   u
            l.s. essive_formal  f

* ***************************** *
6 Definiteness                  -
```



```
- -------------- -------------- -
7 Clitic                        -
- -------------- -------------- -
8 Animate        no             n
                 yes            y
- -------------- -------------- -
9 Formation                     -
- -------------- -------------- -
10Owner_Number   singular       s
                 plural         p
- -------------- -------------- -
11Owner_Person   first          1
                 second         2
                 third          3
---------------- -------------- -
12Owned_Number   singular       s
                 plural         p
=================================
```

Notes:

1. Adjectives have the same suffixes that Nouns have plus Degree.
   Thus the number of possibble forms is 3*924=2772.

2. Types like ordinal and cardinal are grouped as numerals.

Combinations:

```
--- ---- ----- ---- ------------------------ ----  -------- --------- --------
Pos Type Degr  Num  Case                     Anim  OwnerNum OwnerPers OwnedNum
--- ---- ----- ---- ------------------------ ----  -------- --------- --------
 A  f    [pcs] [sp] [ngdaix2et3b9wmcshqypuf] [yn]  [sp]     [123]     [sp]
--- ---- ----- ---- ------------------------ ----  -------- --------- --------
```

Examples on combinations:

```
0123456789012
Afp-sn-------    nagy[A]                           big, great
Afc-sn-------    nagy[A]+obb[FOK]                  bigger
Afs-sn-------    leg[FF]+nagy[A]+obb[FOK]          biggest
Afs-sn----p1s    leg[FF]+nagy[A]+obb[FOK]+jaink[PSt1i]+é[POS]
                                                   that of our greatest (heroes)
Afp-sw-------    magyar[A]+ul[ESSMOD]              in Hungarian
```

10.4 Pronoun (P)

```
= ============== ============== =
```

```
P ATT            VAL            C
= ============== ============== =
1 Type           personal       p
                 demonstrative  d
                 indefinite     i
                 possessive     s
                 interrogative  q
                 relative       r
                 reflexive      x
                 reciprocal     y
- -------------- -------------- -
2 Person         first          1
                 second         2
                 third          3
- -------------- -------------- -
3 Gender                        -
- -------------- -------------- -
4 Number         singular       s
                 plural         p
- -------------- -------------- -
5 Case           nominative     n
                 genitive       g
                 dative         d
                 accusative     a
                 instrumental   i
                 illative       x
                 inessive       2
                 elative        e
                 allative       t
                 adessive       3
                 ablative       b
                 terminative    9
                 essive         w
           l.s.  temporalis     m
           l.s.  causalis       c
           l.s.  sublative      s
           l.s.  delative       h
           l.s.  sociative      q
           l.s.  factive        y
           l.s.  superessive    p
           l.s.  distributive   u
           l.s.  essive_formal  f
- -------------- -------------- -
6 Owner_Number   singular       s
                 plural         p
- -------------- -------------- -
7 Owner_Gender                  -
*********************************
8 Clitic                        -
- -------------- -------------- -
9 Referent_Type                 -
- -------------- -------------- -
10Syntactic_Type                -
```



```
- -------------- -------------- -
11Definiteness                  -
- -------------- -------------- -
12Animate                       -
- -------------- -------------- -
13Clitic_s                      -
- -------------- -------------- -
14Pronoun_Form                  -
- -------------- -------------- -
15Owner_Person   first          1
                 second         2
                 third          3
- -------------- -------------- -
16Owned_Number   singular       s
                 plural         p
=================================
```

Combinations:

```
--- ---- ----- ---- -----------------------  -----------  ------------ ------------
Pos Type Pers  Num  Case                     Owner_Number Owner_Person Owned_Number
--- ---- ----- ---- -----------------------  ------------ ------------ ------------
 P  [px] [123] [sp] [ngdaix2et3b9wmcshqypuf]  [sp]         [123]        [sp]
 P    y     3   p   [ngdaix2et3b9wmcshqypuf]  [sp]         [123]        [sp]
 P    s  [123] [sp] [ngdaix2et3b9wmcshqypuf]  -             -
 P [diqr]  3   [sp] [ngdaix2et3b9wmcshqypuf]  [sp]         [123]        [sp]
```

Examples on combinations:

```
01234567890123456
Pp1-s------------        én[P]                    I
Pp1-p-s--------1-        enyéim[P]                my things (plural)
Pd3-s------------        ez[P]                    this
Pi3-s------------        minden[P]                every
Ps1-s-s--------1-        én[P]=enyém+[POS]        my
Pq3-s------------        ki[P]                    who (in questions)
Pr3-s------------        aki[P]                   who (relative)
Px3-s------------        maga[P]                  himself
Pp3-p------------        ti[P]                    you
Pp3-s-p--------2-        tietek[P]                your something
Pp3-p-p--------2-        tieitek[P]               your somethings
Pp3-s-p--------2s        tieteké[P]               your something
Py3-p------------        egymás[P]                each other
```

10.5 Determiner (D)

Not applicable.

10.6 Article (T)

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
1 Type          definite      f
                indefinite    i
- ------------- ------------- -
2 Gender                      -
- ------------- ------------- -
3 Number                      -
- ------------- ------------- -
4 Case                        -
*******************************
5 Clitic                      -
===============================
```

Notes:

We have tree articles: a, az and egy. These may not have number and case. The word 'az' may have but that is a pronoun in those cases.

Combinations:

```
--- ----
Pos Type
--- ----
T   [fi]
```

```
01
012345
Tf----          a[DET]          the
Tf----          az[DET]         the
Ti----          egy[DET]        a
```

10.7 Adverb (R)

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
1 Type          general       g
                particle      p
           l.s. causal        o
           l.s. verbal        v
                modifier      m
           l.s. interrogative q
- ------------- ------------- -
2 Degree                      -
```



```
*******************************
3 Clitic        no            n
                yes           y
- ------------- ------------- -
4 Number        singular      s
                plural        p
- ------------- ------------- -
5 Person        first         1
                second        2
                third         3
===============================
```

Combinations:

```
----  ------ ------  ------  ------ ------
Pos   Type   Degree  Clitic  Number Person
----  ------ ------  ------  ------ ------
 R    [gmp]   -        -       -     -
 R      q     -        y       -     -
 R      o     -        -      [sp]  [123]
----  ------ ------  ------  ------ ------
```

Examples on combinations:

```
012345
Rg----     most[R]                           now
Rg----     hogyan[R]                         how
Rgp---     belül[R]                          inside
Rgc---     belül[R]=belj+ebb[FOK]            deeper inside
Rgs---     leg[FF]+belül[R]=belj+ebb[FOK]    deepest inside
Rv----     olvas[V]+va[HIN]                  being read
Rm----     nem[R]                            no
Rp----     be[IK]                            into
Rq-y--     kutya[N]+-e[KSZE] (kutya-e?)      dog?
Ro--s1     áll[V]+tomban[HIVe1]              as I stand
Ro--s2     áll[V]+todban[HIVe2]              as you stand
Ro--s3     áll[V]+tában[HIVe3]               as she stands
Ro--p1     áll[V]+tunkban[HIVp1]             as we stand
Ro--p2     áll[V]+totokban[HIVp2]            as you stand
Ro--sp     áll[V]+tukban[HIVep]              as they stand
Ro----     áll[V]+ván[HINN]                  as sy stands
```

Notes:

1. The modifier -e question word (the only Hungarian clitic) is attached to the preceding word with a hyphen.

2. Some adverbs may have degree, but these do not formulate a special class. Presently we cannot give a criteria for this.

10.8 Adposition (S)

```
= ============== ============== =
P ATT            VAL            C
= ============== ============== =
1 Type           postposition   t
- -------------- -------------- -
2 Formation                     -
*********************************
3 Case                          -
- -------------- -------------- -
4 Clitic                        -
=================================
```

Notes:

1. Some of them require a suffix on the preceding noun (e.g. asztal[N]+
   on[SUP] túl[S]) while others do not (e.g. asztal[N] mellett[S]).
   This feature is not represented here.

Combinations:

```
---  ----
Pos  Type
---  ----
 S    t
---  ----
```

Examples on combinations:

```
01234
St---      miatt[S]                    because of
St---      keresztül[S]                through
```

10.9 Conjunction (C)

```
= ============== ============== =
P ATT            VAL            C
= ============== ============== =
1 Type           coordinating   c
                 subordinating  s
*********************************
2 Formation      simple         s
                 compound       c
- -------------- -------------- -
3 Coord_Type     sentence       p
                 words          w
- -------------- -------------- -
```



```
4 Sub_Type                      -
- -------------- -------------- -
5 Clitic                        -
- -------------- -------------- -
6 Number                        -
- -------------- -------------- -
7 Person                        -
=================================
```

Notes:

1. 'form': Some conjuctions in Hungarian might occur alone (1) while
   others in pairs (2).

Combinations:

```
---  ---- ---------- ---------
Pos  Type Coord-Type Formation
---  ---- ---------- ---------
 C   [cs]   [pw]       [12]
---  ---- ---------- ---------
```

Examples on combinations: Meaning:

```
01234567
Csp-1---         hogy[C]               that
Ccp-1---         és[C]                 and
Ccw-2---         is[C]                 also
Ccw-2---         mind[C]               both
```

10.10 Numeral (M)

```
= ============== ============== =
P ATT            VAL            C
= ============== ============== =
1 Type           cardinal       c
                 ordinal        o
                 fractal        f
                 collect        l
- -------------- -------------- -
2 Gender                        -
- -------------- -------------- -
3 Number         singular       s
                 plural         p
- -------------- -------------- -
4 Case           nominative     n
                 genitive       g
```

```
                 dative        d
                 accusative    a
                 instrumental  i
                 illative      x
                 inessive      2
                 elative       e
                 allative      t
                 adessive      3
                 ablative      b
                 terminative   9
                 essive        w
           l.s.  temporalis    m
           l.s.  causalis      c
           l.s.  sublative     s
           l.s.  delative      h
           l.s.  sociative     q
           l.s.  factive       y
           l.s.  superessive   p
           l.s.  distributive  u
           l.s.  essive_formal f
           l.s.  multiplicative 6
*********************************
5 Form           digit         d
                 roman         r
                 letter        l
- -------------- ------------- -
6 Definiteness                 -
- -------------- ------------- -
7 Clitic                       -
- -------------- ------------- -
8 Class                        -
- -------------- ------------- -
9 Animate                      -
- -------------- ------------- -
10Owner_Number   singular      s
                 plural        p
- -------------- ------------- -
11Owner_Person   first         1
                 second        2
                 third         3
- -------------- ------------- -
12Owned_Number   singular      s
                 plural        p
=================================
```

Combinations:

```
--- ---- ---- ------------------------ ----  -------- --------- --------
Pos Type Num  Case                     Form  OwnerNum OwnerPers OwnedNum
--- ---- ---- ------------------------ ----  -------- --------- --------
 N  [cp] [sp] [ngdaix2et3b9wmcshqypuf] [dlr] [sp]     [123]     [sp]
--- ---- ---- ------------------------ ----  -------- --------- --------
```


Examples on combinations:

```
0123456789012
Mc-sn--------     egy[M]                     one
Mc-pn--------     nyolc[M]+ak[PL]            those eight (men)
Mc-pn-----p3s     nyolc[M]+ak[PL]+é[POS]     this belongs to those eight (men)
Mc-sa--------     sok[M]+at[ACC]             many (in accusative)
Mo-sn--------     hat[M]+odik[SORSZ]         6th
Mf-sn--------     hat[M]+od[TORT]            1/6
Mc-s6--------     egy[M]+szer[MUL]           one time
Mc-sw--------     hat[M]+an[ESSMOD]          six of them
```

10.11 Interjection (I)

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
1 Type          mood          m
                other         o
- ------------- ------------- -
2 Formation                   -
=================================
```

10.12 Residual (X)

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
                              -
=================================
```

10.13 Abbreviation (Y)

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
1 Syntactic_Type              -
- -------------------------------
2 Gender                      -
- ------------- ------------- -
3 Number                      -
- ------------- ------------- -
4 Case                        -
```

```
- -------------- -------------- -
5 Definiteness                  -
=================================
```

10.14 Particle (Q)

Not applicable.

10.15 Derivation

Without handling derivation a satisfactory morphological analysis is not possible for Hungarian. The HUMOR system, a general purpose morphological analyzer, handles it and the results can be converted to Multext format since on syntactic level the morphological origin of stems are generally irrelevant. The resulting word class is defined by the rightmost derivational suffix. The suffix characters are literally attached to the word.

Here are the derivations that the analyser recognizes but instead of the origin we place only the resulting class to the output. (Suffix tags used in HUMOR are in upper case, actual suffixes are in lower case.)

```
Noun   -> Adjective
-------------------
-----   -------        --------------    ------------------------
Type    Form           Example           Comment
-----   -------        --------------    ------------------------
 BELI  : beli           ház+beli         property of living in the house
 FAJTA : fajta          más+fajta        of some other kind
 FELE  : féle           bútor+féle       similar to furniture
 FORMA : forma          tojás+forma      egg shaped
 SZERU : szerű          tej+szerű        milk+y
 IKEP  : i              ház+i            home (e.g. made)
 SKEP  : s, as, os,
         es, ös         gyerek+es        child+ish
 UKEP  : ú,
         ű,
         jú,
         jű             arc+ú            (red)-face+d
 FFOSZ : tlan,tlen,
         atlan,etlen,
         talan,telen                     'devoid of', '-less'
 MER   : nyi            kanál+nyi        spoon+full

Noun,A -> Noun
--------------
-----   -------        --------------     ------------------------
Type    Form           Example            Comment
-----   -------        --------------     ------------------------
```



```
 COL   : ság,          barát+ság         friend+ship
         ség

Noun   -> Noun
--------------
-----   -------        --------------    ------------------------
Type    Form           Example           Comment
-----   -------        --------------    ------------------------
 DIM   : cska,acska,
         ecske,öcske,
         ocska         utcá+cska         little street
 FEM   : né            Kovács+né         Mrs. Kovács

Noun   -> Verb
--------------
-----   -------        --------------    ------------------------
Type    Form           Example           Comment
-----   -------        --------------    ------------------------
 FI    : z,az,oz,ez,
         öz            autó+z            go by car

Verb   -> Adjective
-------------------
-----   -------        --------------    ------------------------
Type    Form           Example           Comment
-----   -------        --------------    ------------------------
 IFOSZT: atlan, etlen  felel+etlen       sg not being answered
 MIF   : ó,
         ő             felel+ő           sy who answers
 MIB   : t,ott,ett,
         ött           felel+t           the answered (question)
 MIA   : andó,
         endő          felel+endő        sg that should be answered
 NIVALÖ  anivaló,
         enivaló,
         nivaló        néz+nivaló        sg that should be seen

Verb   -> Adverb
----------------
-----   -------        --------------    ------------------------
Type    Form           Example           Comment
-----   -------        --------------    ------------------------
 HIN   : va,ve         olvas+va          (while ) reading (the book)

Numeral-> Adjective
-------------------
-----   -------        --------------    ------------------------
Type    Form           Example           Comment
```

Type	Form	Example	Comment
KIEM	: ik	hatod+ik	six+th
LAGOS	: lagos,leges	másod+lagos	second+ary

Verb -> Noun

Type	Form	Example	Comment
IF	: ás, és	 olvas+ás	 read+ing (gerund)
DES	: hatnék, hetnék	 olvas+hatnék	 the intention of reading

Adj -> Verb

Type	Form	Example	Comment
FAK	: ít	szép+ít	make it pretty (in compounds only)
MI	: od,ed,öd	vállas+od+ik	becomes strong
MIGY	: kod,ked, köd	 okos+kod+ik	 plays the smart (frequently)

Verb -> Verb

Type	Form	Example	Comment
MUV	: at,et,tat,tet	olvas+tat	makes him read
GYAK	: gat,get,ogat, eget,öget	 olvas+gat	 he reads frequently
HAT	: hat,het	olvas+hat	he may read
VISSZ	: ód, őd	 old+ódik	 dissolves
SZENV	: tatik, tetik	olvas+tatik	makes the book being read

Examples:

If 'szemtelés' (littering, action of throwing away litter) is not in the dictionary we derive it from the verb 'litter' szemetel[V] + és[IF] (where IF=Verb2Noun).

Instead of giving the extra attribute to the verb expressing that it has a derivational suffix we simply give the result of the analysis+conversion: szemetelés[N].

In Hungarian some derivation may follow the inflectional suffix. For these derivations the suffix+derivation together forms a compound derivation. The a new stem is generated from the stem + inflection + derivation segments and the resulting part of speech is determined by the derivation.

Type	Form	Example	Comment
Nc-sn--ns1- +FAM :	ék	apá+m+ék	some people with my father
Nc-su--u--- +IKEP :	i	asztal+onként+i	sg. done by each every table
Afc-sn--n---- +KIEM :	ik	nagy+obb+ik	the bigger one

There are adverbs that may get case endings. Since case inflections derivate adverb from nouns these constructions can be handled as derivations. That means the stem is the stem + inflection combination and the part of speech is adverb.

Type	Form	Example	Comment
Ag---- + ablativ	tól	akkor+tól	since then

10.16 Compounding

Compounding is handled in a very similar way to derivation. The rightmost word class is always the resulting one. If it contains some derivation as well then the result is the word class that the derivation determines.

Examples:

1. Hungarian is similar to German but we have a competence limit: we do not put together more then 2 nouns. These two words might be compounds as well but they must be lexicalized forms. So e.g.: rendőregyenruha (police uniform) is valid since it is put together from rendőr (police) and egyenruha (uniform) where rendőr=rend (order) + őr (guard) and egyenruha=egyen (uni) + ruha (clothes).

2. Of course the situation is more complicated since nouns can be derived from verbs, adjectives or other nouns, and these derivations can be parts of compoundns: e.g. autóbuszmegálló (bus stop) where meg+áll+ó is derived from the verb áll (stand). Whereas megálló is lexicalized so dictionaries might contain it, the morphological rule is productive so compounding works well for constructions like tandíjbefizetés (paying the tution fee)= tan(tution)+ díj(fee)+ be(in) +fizet(pay) +és(ment).

3. Compounding, such as derivation, will not be mirrorred in the Multext format morphological analysis* a converter will produce an acceptable segmentation in the corpus. The word class (POS) for these compounds will be the word class of the output compound (e.g. tandíjbefizetés/N 'the action of paying in the tuition fee').

Chapter 11

Application to Croatian

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This specification is implemented in the lemmatisation module used for the Croatian National Corpus.

Zagreb, 10. July 1998.

11.1 Noun (N)

```
= ============== ============== =
P ATT            VAL            C
= ============== ============== =
1 Type           common         c
                 proper         p
- -------------- -------------- -
2 Gender         masculine      m
                 feminine       f
                 neuter         n
- -------------- -------------- -
3 Number         singular       s
                 plural         p
- -------------- -------------- -
4 Case           nominative     n
                 genitive       g
                 dative         d
                 accusative     a
                 vocative       v
                 locative       l
                 instrumental   i
* ***************************** *
5 Definiteness                  -
- -------------- -------------- -
6 Clitic                        -
- -------------- -------------- -
7 Animate        no             n
```



```
                 yes            y
- -------------- -------------- -
8 Owner_Number                  -
- -------------- -------------- -
9 Owner_Person                  -
- -------------- -------------- -
10Owned_Number                  -
=================================
```

11.2 Verb (V)

```
= ============== ============== =
P ATT            VAL            C
= ============== ============== =
1 Type           main           m
                 auxiliary      a
                 modal          o
                 copula         c
- -------------- -------------- -
2 VForm          indicative     i
                 imperative     m
                 conditional    c
                 infinitive     n
                 participle     p
- -------------- -------------- -
3 Tense          present        p
                 imperfect      i
                 future         f
                 past           s
           l.s.  pluperfect     l
           l.s.  aorist         a
- -------------- -------------- -
4 Person         first          1
                 second         2
                 third          3
- -------------- -------------- -
5 Number         singular       s
                 plural         p
- -------------- -------------- -
6 Gender         masculine      m
                 feminine       f
                 neuter         n
*********************************
7 Voice          active         a
                 passive        p
- -------------- -------------- -
8 Negative       no             n
                 yes            y
- -------------- -------------- -
9 Definiteness                  -
```

P	ATT	VAL	C
10	Clitic		-
11	Case		-
12	Animate		-
13	Clitic_s		-

11.3 Adjective (A)

P	ATT	VAL	C
1	Type	qualificative	f
		possessive	s
2	Degree	positive	p
		comparative	c
		superlative	s
3	Gender	masculine	m
		feminine	f
		neuter	n
4	Number	singular	s
		plural	p
5	Case	nominative	n
		genitive	g
		dative	d
		accusative	a
		vocative	v
		locative	l
		instrumental	i
6	Definiteness	no	n
		yes	y
7	Clitic		-
8	Animate	no	n
		yes	y
9	Formation		-
10	Owner_Number		-
11	Owner_Person		-

P	ATT	VAL	C
12	Owned_Number		-

11.4 Pronoun (P)

P	ATT	VAL	C
1	Type	personal	p
		demonstrative	d
		indefinite	i
		possessive	s
		interrogative	q
		relative	r
		reflexive	x
2	Person	first	1
		second	2
		third	3
3	Gender	masculine	m
		feminine	f
		neuter	n
4	Number	singular	s
		plural	p
5	Case	nominative	n
		genitive	g
		dative	d
		accusative	a
		vocative	v
		locative	l
		instrumental	i
6	Owner_Number	singular	s
		plural	p
7	Owner_Gender	masculine	m
		feminine	f
		neuter	n
8	Clitic	no	n
		yes	y
9	Referent_Type	personal	p
		possessive	s
10	Syntactic_Type	nominal	n

```
                adjectival     a
- -------------- -------------- -
11Definiteness                 -
- -------------- -------------- -
12Animate        no             n
                 yes            y
- -------------- -------------- -
13Clitic_s                     -
- -------------- -------------- -
14Pronoun_Form                 -
- -------------- -------------- -
15Owner_Person                 -
- -------------- -------------- -
16Owned_Number                 -
- -------------- -------------- -
17Wh_Type                      -
================================
```

11.5 Determiner (D)

Not applicable.

11.6 Article (T)

Not applicable.

11.7 Adverb (R)

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
1 Type          general       g
- ------------- ------------- -
2 Degree        positive      p
                comparative   c
                superlative   s
*******************************
3 Clitic                      -
- ------------- ------------- -
4 Number                      -
- ------------- ------------- -
5 Person                      -
- ------------- ------------- -
6 Wh_Type                     -
===============================
```


11.8 Adposition (S)

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
1 Type          preposition   p
- ------------- ------------- -
2 Formation     simple        s
                compound      c
*******************************
3 Case
  (req.by prep.) genitive     g
                dative        d
                accusative    a
                locative      l
                instrumental  i
- ------------- ------------- -
4 Clitic                      -
===============================
```

11.9 Conjunction (C)

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
1 Type          coordinating  c
                subordinating s
*******************************
2 Formation     simple        s
                compound      c
- ------------- ------------- -
3 Coord_Type                  -
- ------------- ------------- -
4 Sub_Type                    -
- ------------- ------------- -
5 Clitic                      -
- ------------- ------------- -
6 Number                      -
- ------------- ------------- -
7 Person                      -
===============================
```

11.10 Numeral (M)

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
1 Type          cardinal      c
```

```
                 ordinal       o
                 multiple      m
                 special       s
- -------------- ------------- -
2 Gender         masculine     m
                 feminine      f
                 neuter        n
- -------------- ------------- -
3 Number         singular      s
                 plural        p
- -------------- ------------- -
4 Case           nominative    n
                 genitive      g
                 dative        d
                 accusative    a
           l.s.  vocative      v
                 locative      l
                 instrumental  i
*********************************
5 Form           digit         d
                 roman         r
                 letter        l
- -------------- ------------- -
6 Definiteness                 -
- -------------- ------------- -
7 Clitic                       -
- -------------- ------------- -
8 Class                        -
- -------------- ------------- -
9 Animate        no            n
                 yes           y
- -------------- ------------- -
10Owner_Number                 -
- -------------- ------------- -
11Owner_Person                 -
- -------------- ------------- -
12Owned_Number                 -
=================================
```

11.11 Interjection (I)

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
1 Type                        -
- ------------- ------------- -
2 Formation     simple        s
                compound      c
===============================
```


11.12 Residual (X)

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
                              -
===============================
```

11.13 Abbreviation (Y)

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
1 Syntactic_Type nominal      n
                adverbial     r
- -----------------------------
2 Gender        masculine     m
                feminine      f
                neuter        n
- ------------- ------------- -
3 Number        singular      s
                plural        p
- ------------- ------------- -
4 Case          nominative    n
                genitive      g
          l.s.  dative        d
          l.s.  accusative    a
          l.s.  locative      l
          l.s.  instrumental  i
- ------------- ------------- -
5 Definiteness                -
===============================
```

11.14 Particle (Q)

```
= ============= ============= =
P ATT           VAL           C
= ============= ============= =
1 Type          negative      z
                interrogative q
                modal         o
                affirmative   r
- ------------- ------------- -
2 Formation                   -
- ------------- ------------- -
3 Clitic                      -
===============================
```

```
Notes:

Type=negative used for negation with 'ne', =interrogative for 'li' and
'zar, =affirative for 'da'.
```