

EXPANSION OF CONFIGURATION WITHIN THE C_A COMPLEX — v.0.3.1 SEVEN OPTIONS

OPTION 1: The Full C_A complex; with all twenty configurations, plus Context + Essence. The downside of this option is the large number of allomorphic substitutions necessary and the fact that there are 15,360 forms, twice the number as Options 2, 3, or 4.

AFFILIATION		CONFIGURATION				Extension		Perspective = Number of Sets or Nature of the Set		Context + Essence																										
		Membership	Structure	Similarity																																
CSL	[zero] (l)	UNIPLEX	UXS Specific	[zero]		DEL	[zero]	M	[zero]		NRM	RPV																								
ASO	l (t!)		UXP Potential	mɿ		PRX	s / z	P	t / d (l̥t)	EXS	[zero]	y (l̥y)																								
VAR	ř	DUPLEX		DPS Similar	DPD Dissim.	DPF Fuzzy	ICP	f / v (f̥t)	N	p / b (lp)	FNC	l (n!)	w (l̥w)																							
COA	r						ATV	š / ž	A	k / g (lk)	RPS	r (x)	ř (xx)																							
			SEP Separate	t̥	ɸ	nn	GRA	ss / zz			AMG	h / rr * (lx)	hw / řř * (rx)																							
			CND Connected	f	v	mm	DPL	šš / žž	ts(s) → c(c) tš(š) → č(č) dz(z) → ž(ž) dž(ž) → j(j)																											
		FSD Fused	t̥t̥	ɸɸ	ňň	In addition to the usual combinations above, the following allomorphic substitutions are required due to the default combination being phonotactically impermissible:																														
			MPS Similar	MPD Dissim.	MPF Fuzzy	ɸz(z)[d/b/g/∅] → c(c)[d/b/g/v] (c)cy → (z)zg (n)np → (m)mb rř = sc ɸž(ž)[d/b/g/∅] → č(č)[d/b/g/v] (č)čy → (ž)žg (ň)ňk → (n)ng řr = šč ɸɸz(z)[d/b/g/∅] → ž(ž)[t/p/k/v] (ž)žy → (z)zd (n)nf → (m)mv ɸɸž(ž)[d/b/g/∅] → j(j)[t/p/k/v] (j)jy → (ž)žd (ň)ňy → (n)nd																														
						* AMG Context values are dependent on the preceding consonant:																														
						<ul style="list-style-type: none"> • Use -h- and -hw- after voiceless stops and affricates -p-, -t-, -k-, -c-, and -č- • Elsewhere use -rr- and -řř- (or -h- and -hw- may be used if not phonetically awkward). 																														
<p>The following allomorphic substitutions are used to address difficult-to-pronounce or phonetically awkward combinations (e.g., double-geminates):</p> <table border="0"> <tr> <td>t̥t̥[t/p/k] → t̥[d/b/g]</td> <td>tf[t/p/k] → nt̥[d/b/g]</td> <td>nns(s) → nz(z)</td> </tr> <tr> <td>ɸɸ[d/b/g] → ɸ[t/p/k]</td> <td>dv[d/b/g] → nt̥[t/p/k]</td> <td>nnš(š) → nž(ž)</td> </tr> <tr> <td>t̥f[t/p/k] → f[d/b/g]</td> <td>bv[d/b/g] → pt̥[t/p/k]</td> <td>mms(s) → mz(z)</td> </tr> <tr> <td>ɸv(b/d/g) → v[t/p/k]</td> <td>gv[d/b/g] → kt̥[t/p/k]</td> <td>mmš(š) → mž(ž)</td> </tr> <tr> <td>t̥s(s) → s[d/b/g]</td> <td></td> <td>ňňs(s) → ňz(z)</td> </tr> <tr> <td>t̥š(š) → š(š)[d/b/g/v]</td> <td></td> <td>ňňš(š) → ňž(ž)</td> </tr> <tr> <td>t̥t̥s(s)[t/p/k/∅] → (z)z[t/p/k]</td> <td></td> <td></td> </tr> <tr> <td>t̥t̥š(š)[t/p/k/∅] → (ž)ž[t/p/k/v]</td> <td></td> <td></td> </tr> </table>													t̥t̥[t/p/k] → t̥[d/b/g]	tf[t/p/k] → nt̥[d/b/g]	nns(s) → nz(z)	ɸɸ[d/b/g] → ɸ[t/p/k]	dv[d/b/g] → nt̥[t/p/k]	nnš(š) → nž(ž)	t̥f[t/p/k] → f[d/b/g]	bv[d/b/g] → pt̥[t/p/k]	mms(s) → mz(z)	ɸv(b/d/g) → v[t/p/k]	gv[d/b/g] → kt̥[t/p/k]	mmš(š) → mž(ž)	t̥s(s) → s[d/b/g]		ňňs(s) → ňz(z)	t̥š(š) → š(š)[d/b/g/v]		ňňš(š) → ňž(ž)	t̥t̥s(s)[t/p/k/∅] → (z)z[t/p/k]			t̥t̥š(š)[t/p/k/∅] → (ž)ž[t/p/k/v]		
t̥t̥[t/p/k] → t̥[d/b/g]	tf[t/p/k] → nt̥[d/b/g]	nns(s) → nz(z)																																		
ɸɸ[d/b/g] → ɸ[t/p/k]	dv[d/b/g] → nt̥[t/p/k]	nnš(š) → nž(ž)																																		
t̥f[t/p/k] → f[d/b/g]	bv[d/b/g] → pt̥[t/p/k]	mms(s) → mz(z)																																		
ɸv(b/d/g) → v[t/p/k]	gv[d/b/g] → kt̥[t/p/k]	mmš(š) → mž(ž)																																		
t̥s(s) → s[d/b/g]		ňňs(s) → ňz(z)																																		
t̥š(š) → š(š)[d/b/g/v]		ňňš(š) → ňž(ž)																																		
t̥t̥s(s)[t/p/k/∅] → (z)z[t/p/k]																																				
t̥t̥š(š)[t/p/k/∅] → (ž)ž[t/p/k/v]																																				

OPTION 2: Eliminate Essence from the C_A complex; instead, RPV Essence will be shown by syllabic stress-shift (penultimate → antepenultimate, ultimate → pre-antepenultimate). This chart is similar to Option 1 except for the missing Essence values, 6 fewer allomorphic substitutions, and no specialized rules for showing AMG Context.

AFFILIATION		CONFIGURATION				EXTENSION		PERSPECTIVE = Number of Sets or Nature of the Set		CONTEXT			
		Membership	Structure	Similarity									
CSL	[zero] (1)	UNIPLEX	UXS Specific	[zero]		DEL	[zero]	M	[zero]	EXS	FNC	RPS	AMG
ASO	l (t̥)		UXP Potential	m̥t̥		PRX	s / z	P	t / d (̥t̥)	[zero]	l (n̥l̥)	r (x)	w/y (̥w)
VAR	ř	DUPLEX		DPS Similar	DPD Dissim.	DPF Fuzzy	ICP	f / v (f̥t̥)	N	p / b (̥p̥)	Allomorphic Substitutions:		
COA	r					ATV	š / ž	A	k / g (̥k̥)				
			SEP Separate	t̥	ɖ	nn	GRA	ss / zz					
			CND Connected	f	v	mm	DPL	šš / žž					
		FSD Fused	t̥t̥	ɖɖ	ňň					ts(s) → c(c)	tš(š) → č(č)	dz(z) → ž(ž)	dž(ž) → j(j)
				MPS Similar	MPD Dissim.	MPF Fuzzy	t̥t̥[t/p/k] → t̥[d/b/g]	t̥f[t/p/k] → n̥t̥[d/b/g]	(n)np → (m)mb	nns(s) → nz(z)			
							ɖɖ[d/b/g] → ɖ[t/p/k]	dv[d/b/g] → n̥t̥[t/p/k]	(ň)ňk → (n)ng	nnš(š) → nž(ž)			
							t̥f[t/p/k] → f[d/b/g]	bv[d/b/g] → p̥t̥[t/p/k]	(n)nf → (m)mv	mms(s) → mz(z)			
		SEP Separate	t	d	n		ɖv(b/d/g) → v[t/p/k]	gv[d/b/g] → k̥t̥[t/p/k]	řr = řř	mmš(š) → mž(ž)			
		CND Connected	p	b	m		t̥s(s) → s[d/b/g]	ɖz(z)[d/b/g/∅] → c(c)[d/b/g/v]		ňňs(s) → nž(z)			
							t̥š(š) → š(š)[d/b/g/v]	ɖž(ž)[d/b/g/∅] → č(č)[d/b/g/v]		ňňš(š) → nž(ž)			
		FSD Fused	k	g	ň		t̥t̥s(s)[t/p/k/∅] → (z)z[t/p/k]	ɖɖz(z)[d/b/g/∅] → ž(ž)[t/p/k/v]					
							t̥t̥š(š)[t/p/k/∅] → (ž)ž[t/p/k/v]	ɖɖž(ž)[d/b/g/∅] → j(j)[t/p/k/v]					

OPTION 3: Eliminate Context from the C_A complex and add a V_C/V_K Distinction; Context will instead be shown by the four syllabic stress patterns and Slot XIII's status as showing Case or Illocution+Sanction will be determined by this new V_C/V_K Distinction in the C_A complex. The chart for Option 3 is identical to the chart for Option 2 except that the latter's four Context values instead represent the 2-by-2 grid of Essence plus V_C/V_K Distinction.

OPTION 4: Eliminate DUPLEX forms from the C_A complex; instead, all pairs, couples, and 2-member sets will use MULTIPLEX forms and may **optionally** take the SDP affix if necessary to specify the exact structure of a duplex/binary set (the nine degrees of the SDP affix will be redesigned to correspond to the Configuration sub-categories of Structure & Similarity).

While still requiring specialized rules for showing AMG Context, there are far fewer allomorphic substitutions. However, this option requires the re-introduction of /ç/ as a phoneme in the language.

AFFILIATION		CONFIGURATION				EXTENSION		PERSPECTIVE		CONTEXT + ESSENCE			
		UNIPLEX	SPECIFIC	UXS	[zero]						NRM	RPV	
CSL	[zero] (1)		POTENTIAL	UXP	‡	DEL	[zero]	M	[zero]	EXS	[zero]	y (‡y)	
ASO	l (t‡)	MULTI- PLEX	SEP Separate	Similar	SEP/MPS	t	PRX	s	P	t (‡t)	FNC	l (n‡)	w (‡w)
VAR	ř			Dissimilar	SEP/MPD	n	ICP	f	N	k (‡k)	RPS	r (m‡)	ř (‡ř)
COA	r			Fuzzy	SEP/MPF	s (ç)	ATV	š	A	p (‡p)	AMG	h / rr * (lx)	hw / řř * (rx)
			CND Connected	Similar	CND/MPS	p	GRA	ss (x)	Allomorphic Substitutions: ts(s) → c(c) sss → ž np → b tf → v (c)cy → z(z)g tš(š) → č(č) sš(š) → ž(ž) ňk → g řf → ř (č)čy → ž(ž)g ‡s(s) → ‡‡ šs(s) → z(z) nf → d rř = bz žy → zd ‡š(š) → ‡ř ššš → j ñy → nn řr = gz jy → žd				
				Dissimilar	CND/MPD	m	DPL	šš (xx)					
				Fuzzy	CND/MPF	š (çç)							
			FSD Fused	Similar	FSD/MPS	k							
				Dissimilar	FSD/MPD	ň							
				Fuzzy	FSD/MPF	f							

* AMG Context values are dependent on the preceding consonant:

- Use **-h-** and **-hw-** after voiceless stops and affricates **-p-**, **-t-**, **-k-**, **-c-**, and **-č-**
- Elsewhere use **-rr-** and **-řř-** (or **-h-** and **-hw-** may be used if not phonetically awkward).

OPTION 5: Eliminate both DUPLEX forms and Essence from the C_A complex; a combination of Options 2 and 4. This would be the simplest option of all, the advantage being severe streamlining and simplification of the C_A complex. Duplex configurations instead shown via a redesigned SDP affix; Essence shown by 2-say syllabic stress-shift. Only 3840 forms. This option again requires the re-introduction of /ç/ as a phoneme in the language.

AFFILIATION		CONFIGURATION				EXTENSION		PERSPECTIVE		CONTEXT					
		UNIPLEX	SPECIFIC	UXS	[zero]										
CSL	[zero] (1)		POTENTIAL	UXP	‡	DEL	[zero]	M	[zero]	EXS	FNC	RPS	AMG		
ASO	l (t‡)	MULTI- PLEX	SEP Separate	Similar	SEP/MPS	t	PRX	s	P	t (‡t)	[zero]	l (n‡)	r (n‡)	w/y (‡w)	
VAR	ř			Dissimilar	SEP/MPD	n	ICP	f	N	k (‡k)	nn z(z)g ž(ž)g zd žd bz				
COA	r			Fuzzy	SEP/MPF	s (ç)	ATV	š	A	p (‡p)					
			CND Connected	Similar	CND/MPS	p	GRA	ss (x)							
				Dissimilar	CND/MPD	m	DPL	šš (xx)							
				Fuzzy	CND/MPF	š (çç)									
			FSD Fused	Similar	FSD/MPS	k									
				Dissimilar	FSD/MPD	ň									
				Fuzzy	FSD/MPF	f									

Allomorphic Substitutions:

ts(s) → c(c)	sss → ž	np → b	tf → v
tš(š) → č(č)	sš(š) → ž(ž)	ňk → g	‡f → ‡
‡s(s) → ‡‡	šs(s) → z(z)	nf → d	řr = řř
‡š(š) → ‡‡	ššš → j		

OPTION 6: Eliminate DUPLEX forms and Context from the C_A complex, and add a V_C/V_K Distinction; a combination of Options 3 and 4. Same chart as Option 5 above except that the four Context values would instead represent the 2-by-2 grid of Essence plus V_C/V_K Distinction. 3840 forms.

OPTION 7: Reduce the number of DUPLEX forms in the C_A complex to three; use optional SDP affix (to be redesigned) if necessary to specify the Similarity parameter of a Duplex pair.

AFFILIATION		CONFIGURATION				Extension		Perspective = Number of Sets or Nature of the Set		Context + Essence			
		Membership	Structure	Similarity									
CSL	[zero] (l)	UNIPLEX	UXS Specific	[zero]		DEL	[zero]	M	[zero]		NRM	RPV	
ASO	l (t)		UXP Potential	s (fs)		PRX	s / z	P	t / d (t)	EXS	[zero]	y (y)	
VAR	ř	DUPLEX		DPS Similar	DPD Dissim.	DPF Fuzzy	ICP	f / v	N	p / b (p)	FNC	l (n)	w (w)
COA	r		SEP Separate	nn	[use to-be- redesigned SDP affix]		ATV	š / ž	A	k / g (k)	RPS	r (x)	ř (xx)
			CND Connected	mm			GRA	ʦ / ɟ			AMG	h / rr * (lx)	hw / řř * (lxw)
			FSD Fused	ňň			DPL	ç / zz					
		MULTIPLEX		MPS Similar	MPD Dissim.	MPF Fuzzy	ts → c	nns → nz	nnf → vv	nf → v	cy → zg	tʦ → ɟ	
			SEP Separate	t	d	n	tš → č	nnš → nž	mmf → mv	np → mb	čy → žg	dɟ → ɟɟ	
			CND Connected	p	b	m	dz → ž	mms → mz	ňňf → ňv	ňk → ng	žy → (z)zd	řř → sc	
			FSD Fused	k	g	ň	dž → j	mmš → mž	nnʦ → nɟ	nnç → zz	jy → žd	řr → šč	
						sš → ž	ňňs → ňz	mmʦ → mɟ	mmç → ff	ňy → nd			
						sç → z	ňňš → ňž	ňňʦ → ňɟ	ňňç → žž	çy → çç			

* AMG Context values are dependent on the preceding consonant:

- Use **-h-** and **-hw-** after voiceless stops and affricates **-p-**, **-t-**, **-k-**, **-c-**, and **-č-**
- Elsewhere use **-rr-** and **-řř-** (or **-h-** and **-hw-** may be used if not phonetically awkward or impermissible).

THE FOLLOWING NOTES APPLY TO ALL THE VARIOUS CHARTS ABOVE:

1. Values shown in parentheses are the stand-alone forms (when all other sub-category values are zero).
2. Nasal configurations take **voiceless** Extension and Perspective values as a default (i.e., before the application of allomorphic substitutions), e.g., MPF/CND/ICP = **mf** (not **mv**), MPF/SEP/PRX = **ns** (not **nz**). All other Configuration + Extension + Perspective combinations (except allomorphic substitutes) are either voiceless or voiced throughout.
3. The stand-alone Perspective values (**|t**, **|p**, **|k**) are also used if Configuration and Extension are both zero but the Context value is non-zero (so that the Perspective values are not mistaken for being Configuration values).
4. Gemination is not a productive feature; resulting geminate pairs (other than those shown in the chart) consist of separate morphological elements.

SPECIAL NOTE Re OPTIONS 2, 3, 5, and 6

When evaluating the above options and deciding one's preference for the new language, I think it is important to keep one thing in mind: As of the current version of the Morpho-Phonological Design (v.0.9.3.1), the 2-way syllabic stress-shift (penultimate → antepenultimate, ultimate → pre-antepenultimate) is used to eliminate the initial Slot I+Slot II syllable from complex formatives (in those cases where the the Slot III **C_R** consonant-form can appear in word-initial position). This ability to make many complex formatives a full syllable shorter will be lost if we go with Options 2, 3, 5, or 6. It will not be lost with Options 1, 4 or 7.