Sven Osterkamp & Gordian Schreiber: A proposal for a formalized, expandable approach to the taxonomy of writing systems (AWLL13 | 21–23 October 2021)

basic types	selection of subtypes		
	/cv/	/cvc/	found in
	C[V]	C[V].C	Phoenician
	C.Ū / C[Ŭ]	C. \(\bar{V} . C \) \(\bar{C} \) \(\bar{V} \) . C	Arabic (unvocalized)
segmental*	C(ŏ).Ō / Cŏ	C(ŏ).Ō.C / Cŏ.C	Arabic (vocalized)
(unit: /CV/)	Cv	Cv.C*v	Thāna
	C.V	C.V.C	English
[* = mappings on /C/ and /V/ only]	C-V (Cv?)	C-V-C (Cv-C?)	Han'gŭl (Modern Korean)
	C[V] / C.V	C[V].C / C.V.C	'Phags-pa (Old Mandarin) [2]
	C[V] / Cv	C[V].C / Cv.C*v	Devanāgarī (Sanskrit) [2]
	C[V] / Cv	C[V]c / Cv-c	Lepcha [2]
mixed segmental / syllabic	CV _i / C(V _i).V	$CV_i.C(V_i) / C(V_i).V.C(V_i)$	'Phags-pa (Old Mandarin) [1]
	$CV_i / C(V_i)v$	$CV_i.C(V_i)^*v / C(V_i)v.C(V_i)^*v$	Devanāgarī (Sanskrit) [1]
	$CV_i / C(V_i)v$	CV _i c / C(V _i)v-c	Lepcha [1]
	CV	_	Man'yōgana (Old Japanese)
	cv	_	(W)okototen (Class. Japanese)
	CV	CVC	Akkadian
syllabic*	CV	CV _x .(V _x)C	Akkadian
(unit: /CVC/)	CV	CV.C	Hiragana (Modern Japanese)
	CV	CV.C(V _x)	Hiragana (Classical Japanese)
[* = also involves	CV	$CV_x.C(V_x)$	Classic Mayan
mappings on /CV/, /VC/, /CVC/, etc.]	CV	CV[C]	Hiragana (Classical Japanese)
	C.V	C.VC	Bopomofo
	C_iV	C _i VC	Pahawh Hmong
	CV_i $C(V_i)$ - $(C_i)V$	— C(V _i)-(C _i)VC	(1: k-; 2: -au; 3: ≠ k- & ≠ -au)
morphemic	F		Modern Japanese, English
(unit: morpheme)	В		Modern Japanese
combinatorics (unit: word)	M		Mandarin Chinese
	M / M.P / P.M /		Modern Japanese
	M / M-P / P-M / P-M-P /		Classic Mayan

Overview of symbols used

free / bound graphs X/x

boundaries ...

... between segmental spaces . as in X.Y ... within a segmental space - as in X-Y (unless implied by change in case $Xy \triangleq X-y$)

phono- / morphograms P/M, p/m

free / bound morphemes F/B, f/b

consonants, vowels, ... C, V, CV, VC, CVC, ...

 $\begin{array}{lll} \text{long / short vowels} & \nabla/\check{V}, \bar{V}/\check{V} \\ \text{specific, inherent vowels} & V_x, V_i \, (\text{also C}_i) \\ \text{unwritten elements} & [C], [V], [B], \dots \\ \text{suppressed portions} & C(V_i), (C_i)V, \dots \end{array}$

graphs to suppress X explicitly *v, *c

Notes

Grayed out text indicates redundant or predictable information. Renderings of /CV/ in segmental systems typically allow us to predict their treatment of /CVC/ (the only systematic exception being the occurrence of <*v>, which is not predictable). Similarly, renderings of /CVC/ in syllabic systems allow us to predict their treatment of /CV/.

For so-called *abugidas* (here: 'Phags-pa, Devanāgarī, Lepcha) two different interpretations are given: [1] = as mixed systems: partly segmental and partly syllabic; [2] = as purely segmental systems.

Subsystems that are in complementary distribution (depending on vowel quantity or quality in Arabic and the above-mentioned *abugidas* respectively) are given together, but separated by a slash.