Kagangana (カガガナ)

Kagangana is an alternative script to write Indonesian and other regional languages in Indonesia using Japanese katakana with a bit of adaptation. Its name derived from syllables ka, ga, and nga that commonly appear as three first syllables on traditional scripts in Indonesia. The idea of making the adaptation came from Erlangga Saputra, an Indonesian student who started to learn Japanese in his high school years, in 2017 and is improved in the next years. He expect that this script could be a new style to write Indonesian as an unofficial writing system for Indonesian youngers who are interested in Japanese and especially for both of Indonesians and Japaneses to relate each other.

Notable features

Type of writing system: syllabary

Direction of writing: left to right in horizontal lines

Used to write: Indonesian (also applicable for Malay, Javanese,

Sundanese, and other regional languages in Indonesia)

Chart A

This chart contains syllables that used in Indonesian native sounds.

		11110	oriart co	itali io oy	liables tri
ア	し、	う	エ	才	カ
а	i	u	е	0	'/k
[a]	[i]	[u]	[ε/e]	[c/o]	[3]
カ	+	ク	ケ	П	ク
ka	ki	ku	ke	ko	k
[ka]	[ki]	[ku]	[kε/ke]	[ko/kɔ]	[k]
ガ	ギ	グ	ゲ	ļ	グ
ga	gi	gu	ge	go	g
[ga]	[gi]	[gu]	[gɛ/ge]	[go/gɔ]	[k]
ガ	ギ	グ	ゲ	$\mathring{\sqcap}$	グ
nga	ngi	ngu	nge	ngo	ng
[ŋa]	[ŋi]	[ŋu]	[ŋɛ/ŋe]	[ŋo/ŋɔ]	[ŋ]
ナ	_	ヌ	ネ	1	ヌ
na	ni	nu	ne	no	n
[na]	[ni]	[nu]	[nɛ/ne]	[no/nɔ]	[n/ɲ]
ナ゛		ヹ	ネ゛	ノ゛	
nya	nyi	nyu	nye	nyo	
[ɲa]	[ɲi]	[ɲu]	[ɲɛ/ɲe]	[no/ɲɔ]	
タ	チ	ツ	テ	-	
ta	ti	tu	te	to	t
[ta]	[ti]	[tu]	[tɛ/te]	[to/tɔ]	[t]
ダ	ヂ	ヅ	デ	ŀ,	ド
da	di	du	de	do	d
[da]	[di]	[du]	[dɛ/de]	[cb/ob]	[d]
/\	Ł	フ	^	朩	_
ha	hi	hu	he	ho	h
[ha]	[hi]	[hu]	[hɛ/he]	[ch/od]	[h]
バ	ビ	ブ	ベ	ボ	ブ
ba	bi	bu	be	bo	b
[ba]	[bi]	[bu]	[bɛ/be]	[cd/od]	[b]
パ	ピ	プ	~	ポ	プ
ра	pi	pu	ре	ро	р
[pa]	[pi]	[pu]	[pɛ/pe]	[po/po]	[p]

abla	111	L	У	Ŧ	L
ma	mi	mu	me	mo	m
[ma]	[mi]	[mu]	[mɛ/me]	[mo/mɔ]	[m]
ヤ	1	ユ	イェ	田	
ya	yi	yu	ye	yo	
[ja]	[ji]	[ju]	[jε/je]	[ci/oj]	
ラ	リ	ル	レ	П	ル
ra	ri	ru	re	ro	r
[ra]	[ri]	[ru]	[rɛ/re]	[cr/or]	[r]
ラ゜	IJ°	ル゜	レ゜	$\overset{\circ}{\sqcap}$	ル゜
la	li	lu	le	lo	Ι
[la]	[li]	[lu]	[lɛ/le]	[cl/ol]	[1]
ワ	#	ウ	ヱ	ヲ	
wa	wi	wu	we	wo	
[wa]	[wi]	[wu]	[wɛ/we]	[cw/ow]	
サ	シ	ス	セ	ソ	ス
sa	si	su	se	SO	S
[sa]	[si]	[su]	[sɛ/se]	[so/sɔ]	[s]
ジァ	ジ	ジゥ	ジェ	ジォ	
ja	ji	ju	je	jo	
[d͡ʒa]	[d͡ʒi]	[d͡ʒu]	$[\widehat{d3}\epsilon/\widehat{d3}e]$	[d͡ʒo]	
シァ	\c,	ジゥ	シェ	シャ	
са	ci	cu	ce	СО	
[t͡ʃa]	(fji)	[t͡ʃu]	[t͡ʃɛ/t͡ʃe]	[t͡ʃo]	

アィ	アゥ	エィ	オィ	エゥ	ン
ai	au	ei	oi	е	-N-
[aɪ̯]	[aʊ̯]	[eĭ]	[oĭ]	[ə]	[n/ŋ/ɲ/m]

Chart A+

This chart contains syllables that only used for other native sounds in other regional languages in Indonesia

タハ	チヒ	ツァ	テヘ	トホ	
tha	thi	thu	the	tho	
ダハ	ヂィ	ヅヮ	デヘ	ドォ	
dha	dhi	dhu	dhe	dho	
ヺ	リ゛	ル	レ	П̈́	ル
ra	ri	ru	re	ro	r
	/r/ soun	d variatior	าร: [ʁ], [x],	[γ], etc.	
ヤ		그		: Ш	ユ
+ya		+yu		+yo	У
[ia]		[ju]		[io]	[j]
		for exa	ample:		
ジャ		ビュ		ショ	ワュ
јуа		byu		syo	way
[d͡ʒʲa]		[b ^j u]		[s ^j o]	[waj]

ムバ	ムビ	ムブ	ムベ	ムボ
mba	mbi	mbu	mbe	mbo
ムパ mpa	ムピ mpi	ムプ mpu	ムペ mpe	ムポ mpo
ヌタ	ヌチ	ヌツ	ヌテ	ヌト
nta	nta	nta	nta	nta

エゥ゜	オァ	オォ	ヴ
eu	ö	ô	u
[x /ɯ/ɨ]	[^]	[o]	/u/ variant

Chart B

This chart contains syllables that only used for loanwords in Indonesian.

ファ	フィ	フゥ	フェ	フォ	フ
fa	fi	fu	fe	fo	f
[fa]	[fi]	[fu]	[fɛ/fe]	[ch/o]	[f]
ヷ	ヸ	ヴ	Ĭ	ヺ	ヮ゙゙
va	vi	vu	ve	VO	V
[fa]	[fi]	[fu]	[fɛ/fe]	[fo/fɔ]	[f]
くァ	くィ	<	くェ	くォ	
qa	qi	qu	qe	qo	
[ka]	[ki]	[ku]	[kε/ke]	[ko/kɔ]	
シァ	シィ	シゥ	シェ	シォ	シ
sya	syi	syu	sye	syo	sy
[ʃa]	[i]	[ʃu]	[[ɛ/ʃe]	[[c]/[ɔ]]	IJ
クハ	クヒ	クフ	クヘ	クホ	クホ
kha	khi	khu	khe	kho	kh
[xa]	[xi]	[xu]	[xɛ/xe]	[cx\ox]	[x]
クサ	クシ	クス	クセ	クソ	クス
xa/ksa	xi/ksi	xu/ksu	xe/kse	xo/kso	ks
[ksa]	[ksi]	[ksu]	[ksɛ/kse]	[kso/ksɔ]	[ks]



Notes

- Every consonant in the final of syllable is represented as katakana small -u, -o, or -i form. The exception is available for final -h which is represented by katakana prolonged sound but it is pronounced [h]. The gray color on the charts mean there is not used.
- Katakana small ka ヵcan be used for final -k pronounced [ʔ] e.g. *rakyat* written ラヵヤト or for replacing the former use of apostrof (') like in *sa'at* written サヵアト.
- Following katakana he ↑ that has a similar form with hiragana he ↑, some syllables don't take the katakana form in this adaptation but take the hiragana form instead; the katakana form could be used for another syllable or sound. In this adaptation, hiragana u ⋾ represents /u/ then katakana u ゥ represent /wu/; hiragana i い represents /i/ then katakana i ≺ represents /yi/; and hiragana ku 〈 is used for /qu/. Nevertheless, katakana small i and katakana small u are used instead of the hiragana.

- If there is unavailable, katakana wi ヰ and we ヱ may be replaced by wi ウィ and we ウェ respectively. It also may be implemented in katakana vi and katakana ve.
- Diphthongs

For the diphthong au it can be written as -a kana + ゥ e.g. アゥヂオ (audio) and ハリマゥ (harimau).

For the diphthong ai it can be written as -a kana + \checkmark e.g. n n

For the diphthong *ei* it can be written as -e kana +ィ e.g. スルヴェィ (*survei*).

For the diphthong *oi* it can be written as -o kana + ィ e.g. アムボィ (*amboi*).

- For /ə/ sound syllables, those are written as -e kana + ゥ e.g. セゥナゥ (senang)
- Katakana N ン is used for /n/, /ng/, /ny/, or /m/ sounds, depending on what sounds surround it, in various prefixes: meN- and peN- forms. In the other hand, the use is to emphasize the prefixes instead of using other kanas sound similar. For example, *membaca* is written メゥンバジァ instead of メゥムバジァ, *pencarian* is written ペゥンジァリアヌ intead of ペゥヌジァリアヌ, but *penjara* is correctly written ペゥヌジァラ since the *pen* is not a prefix.

This table displays variations and changings of katakana N sounds in Kagangana

ン as:	First Sound	Examples	Specials
/ng/ [ŋ]	(vowels), /g/, /h/ /k/, /kh/	いシ (isi) → メゥンいシ (mengisi); ガリ゚(gali) → メゥンガリ゚ (menggali)	change to \mathcal{S} preceding /k/; k- kana change to kana small vowels
/m/	/b/, /p/, /f/, /v/	バジァ (baca) → メゥンバジァ (membaca)	change to \wedge preceding /p/*
/n/	/c/, /d/ /j/, /sy/, /t/, /z/,	ダキ (daki) → メゥンダキ (mendaki); ジゥル (juru) → ペゥンジゥル (penjuru)	t- kana succeding ン change to kana small vowels
/ny/ [ɲ]	/s/	スタビル [°] (stabil) → ペゥンスタビル [°] (penstabil)	change to ジ preceding /s/**

Examples for Spesials
カバル (kabar) → メゥン゚ァバルイ (mengabari)
パカィ (pakai) → ぺゥんァカィ (pemakai)
ツツㇷ゚ (tutup) → メゥンゥツㇷ゚ (menutup);
スラト (surat) → メゥン゙ゥラト (menyurat)

^{*} p- kana change to kana small vowels but there is no change for the initial of /pr/ and /pl/.

- For other affixes, those must be separated with the base word. For example, beradu (base word: adu) correctly written ベゥルアヅ /ber-a-du/, not ベゥラヅ /be-ra-du/; amati (base word: amat) correctly written アマトイ /a-mat-i/, not アマチ /a-ma-ti/; rautan (base word: raut) correctly written ラゥトアヌ /ra-ut-an/, not ラゥタヌ /ra-u-tan/.
- The consonant blend/cluster e.g. /kr/, /pl/, /str/, /kstr/ and more, is written as the katakana small form in the initial. For example, *plastik* is written プラスチク, and *ekstra* is written エクストラ.
- For a fully reduplication word, double hyphen = is used e.g. クラ = クラ (kura-kura) or kana repeat mark 々 may be used at the ending of the word e.g. クラ々(kura²).
- For a repeated syllable in a word, katakana iteration mark ゝ or the voiced iteration mark ゝ or the semi-voiced iteration mark ゝ may be used e.g. スゝ (susu), ガヾゥ (gagak), バゝ ヵ (bapak).
- The th- and dh- syllables kana could be used for Javanese /th/ and /dh/, and other similar sounds in other languages. The other variants of aspirate e.g. kh, bh, etc., could be written with katakana small h- by its preceding kana.
- The r- kana with dakuten can be used for /r/ sound variants like in Lampung language and others.
- The mb-, mp-, nt-, and nd- syllables kana could be used in numerous languages like Rejang language and others. The other syllables like nc-, nj-, and ngk- could be written in the similar way.
- The kana for eu represents [τ], [ɨ], or [ω] like in Sundanese, Acehnese, and others.
- The kana for ö and ô could be used in Acehnese.
- There is no space between words. As a replacement, a middle dot \cdot is used for the word separator.
- Japanese punctuation like [、], [。], [「...」], and [∼] are used as comma, full stop, quotation mark, and en/em dash respectively. Other punctuation marks are same as common.
- The abbreviation is written as how the letters spelled and between Japanese quotation mark. For example KBBI is written 「カベベい」.

^{**} s- kana change to kana small vowels but there is no change for the initial of /st/ and /str/.

Example text

セゥムア·オラゥ゚·ヂ゙ヺ゚ヒルカヌ·メゥルデカ·ダヌ·メゥんプデい·マルタバト·ダヌ·ハゥ゠ハゥ·ヤゥ゚·サマ。メゥレカ·ヂカルニアい·アカル゚·ダヌ·ハチ·ヌラニ·ダヌ·ヘゥヌダゥザ·ベゥルガうル゚·サツ·サマ·ゔ゚いヌ·ダゔ゚ム·セゥマガト·ペゥルサゥダラアヌ。

Semua orang dilahirkan merdeka dan mempunyai martabat dan hak-hak yang sama. Mereka dikaruniai akal dan hati nurani dan hendaknya bergaul satu sama lain dalam semangat persaudaraan.

All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood. (Article 1 of the Universal Declaration of Human Rights)