§20. WRITING & ALPHABETS <http://www.omniglot.com/writing/oldenglish.htm> ARMENIAN SCRIPT

		O	rder d	of Introdu	ction	for t	he Letters	5		
	LOWE	R CAS	SE	3-01	ţ	e:	5-02	Ľ	ə	
	1-01	ш	а	3-01			5-03	F	В	
	1-02	Щ	р		2	ð	5-04	L	GH	
	1-03	Ъ	n [.]	3-03	ታ	zh	5-05	ł	D	
	1-04	பி	m	3-04	4	ts	5-06	- Л	P	
	1-05	п	0	3-05	2	dz	5-07	д	G	I
	1-06	ΠL	u	3-06	Ъ	ch	*	с Ф		
	1-07	U	s	3-07	2	sh	5-08		ZH	
	1-08	• L	1	3-08	٤	ch'	5-09	ન્ ક	V 	
	1-09	ь Б	е	3-09	2	j	5-10	4	K	
	1-10	þ	i	3-10	n.	rr	5-11	Ł	K'	
	1-11	4	k	3-11	4	p'	6-01	2	Z	
	1-12	ר ק	r	3-12	ֆ	f	6-02	2	DZ	
	1-13	Г и	t	3-13	L	ev	6-03	2	l	
	1-14			UPPER	CAS	E .	6-04	2	CH'	
	1-15	J o	у	4-01	U .	S	6-05	B	Y	
			0:	4-02	U.	Α	6-06	8	TS'	
	2-01	4	v	4-03	Մ	. M	7-01	0	O:	
,	2-02	ና	h	4-04	Ն	N	7-02	<u></u>	TS	
	2-03	P	ť'	4-05	N	0	7-02 7-03	ø	P'	
	2-04	ባ	d	4-06	በኮ	U	7-03	ተ (ስ	r T'	
	2-05	4	g	4-07	ቡ	RR		h N		
	2-06	₽	k'	4-08	Þ	I	7-05		KH	
	2-07	9	ts'	4-09	L	L	7-06	ک	H	
	2-08	2	gh	4-10	ţ	E:	7-07	ช้ ~	CH	
	2-09	P	b	4-11	с С	E	7-08	T	SH	
	2-10	þ	kh				7-09	S	Т	 Zou tot i
	2-11	2	z	5-01	ſ	R	7-10	ይ	F	
										新闻: 11 · 1

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£ 1; ⇒

Devanagari Script

Devanagari script uses the basic system used for all the Indian scripts described in this chapter. (1) There is neither a distinction between capitals and small letters as in Latin script nor a variation in initial, medial, and final forms as in Arabic script. (2) There are vowels and consonants. (3) Each consonant includes an inherent a-vowel. (4) Vowel signs are used; when a consonant's inherent a-sound changes to a different vowel, an abridged form of the appropriate vowel letter is attached to the consonant. (5) Conjunct consonants are used; when two or more consonants are combined with no intervening vowel, they are written as one letter. (6) Letters run from left to right on a horizontal line, with a space between each word.

Devanagari script is used to write Sanskrit, Hindi, Marathi, and various other Indian languages. Though its writing system for Sanskrit is very intricate, the following tables suffice for Hindi.

X 7		- 1	-
v	OM	/ei	2

अ (म्र ऋ ए	ā		ई ग			ऊ ^{ज्ञ}
ri ē	ai		аи	ar	1 (<i>a</i> '
Consonants						
GUTTURALS	क ka	ख kha	ग् _{ga}	घ _{gha}	डुः _{nga}	
PALATALS	च cha	छ chha		झ (_{jha}		ञ ^{nya}
CEREBRALS	さ ta	ठ ţha	ड da	ठ dha	ण "	(गा) a
Dentals	त	थ tha	द da	ध dha	न na	
Labials	प _{pa}	<mark>ም</mark> pha	(फ़) fa	ब ba	भ ^{bha}	म ^{ma}

Semi-vowels	य	र	ल	व
	уа	ra	la	va, wa
SIBILANTS	হা	ष	स	
	sa, s h a	sha	sa	
Aspirate	ह			
	ha			

Vowel signs

○ -a	ा -ā	f O - <i>i</i> - C	ी -र	ु-u ू- ū
		ै -ai C		
Thus,	कि ki,	के kē.		

Conjunct consonants Succeeding consonants become subscripts: $\overline{s} \cdot nga + \overline{s} ka = \overline{s} \dot{n}ka$. Preceding consonants become half letters: न्स *nsa*, ध्म *shma*. Such forms are frequently used in printing for convenience: $\overline{s} \rightarrow \overline{s} kka$.

Transformations: $\overline{\mathbf{n}} ka + \overline{\mathbf{q}} sha = \overline{\mathbf{q}} ksha$, $\overline{\mathbf{q}} ta + \overline{\mathbf{q}} ta = \overline{\mathbf{q}} tta$. Preceding r becomes $\bigcirc^{\mathbf{c}}$: $\overline{\mathbf{q}}^{\mathbf{c}} rma$.

Succeeding r becomes \bigcirc or \bigcirc ; thus \Re kra, $\not\subseteq$ tra, \Im pra.

Other signs

Reading and punctuation Since the top of every Devanagari letter consists of a horizontal stroke, the letters of each word appear to be connected by a single line. The mark (|)is equivalent to a period, and (||) is used at the end of a text.

Numerals

१	२	ર	ሄ	ષ	६	૭	ረ	९	0
1	2	3	4	5	6	7	8	9	0

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Tamil Script

The four scripts of Tamil, Telugu, Kannada, and Malayalam are called Southern Indian scripts of the Dravidian group. Generally they are rounded in form, though their structures are the same as those of the Northern Indian scripts. Tamil script is representative of the Dravidian scripts, but unlike the others, it has neither conjunct consonants nor aspirated letters. A distinct script known as Tamil Granta contains these letters, which are needed to write Sanskrit and Pali (Indic/Indo-European). Ordinary Tamil script, therefore, has a very lucid system.

Vowels

ঞ	ஆ	Ø	æ	٤	291	எ
a	ā	i	ī	и	ū	е
ஏ	æ	છ	ଚୁ	ஔ	00	•
ē	ai	0	ō	au	а	,

Consonants

ස	ГБЛ	æ	•	ஞ	L	-	ண	த	ந
ka,ga	nga	cha,	sa	nya	ţa,	ļа	ņa	ta,da	na
ப	ம	ய	Ţ	ស	ഖ	₽₽	ள	ற	ன
pa,ba	ma	уа	ra	la	va	la	la	ra	na
Additional consonants for borrowed words:									

ጽ	ஷ	സ	ஹ	ጭቀ
ja	sa	sa	ha	ksa

Vowel signs

⊖r -ā	ੀ -i	্র -1	_ 1 -u
_ ∏ -ū	ରଠ <i>-e</i>	C) <i>−ē</i>	ൈ <i>–ai</i>
ொ -0	C⊖r -ō	ௌ –ு	ш

For the letter p na: $p r n\bar{a}$, p ni, p ni,

The letter σ ra becomes π when it is not to be confused with the $-\ddot{a}$ sign: fi ri, fi $r\bar{i}$.

The succeeding sign or -au is the same form as the letter or la.

Irregular forms of the $-\bar{a}$, -o; and $-\bar{o}$ signs:

ഞ ṇa → ഞ	ṇā,) <i>ņo</i> , C	™ nō
pra→ ആr	rā, ரெ	ro, C	ரோ rō
ன na → ത	nā, ത	no, C	ල nō
Irregular forms	of the -u	and -ū s	signs:

es ka, ceg ku, er⊾ kū	пы nga, пы ngu, пы ngū
ச cha, म chu, मु chũ	∟ ța, ら țu, ♂ țū
ц <i>ра</i> , ц <i>ри</i> , ц <i>р</i> и	ம <i>та,</i> மு <i>ти,</i> மூ <i>т</i> ū
ш уа, щ уи, щ уй	ரra, ருru, ரூrü
ม va, มุ vu, ญ vū	ழ la, ழு lu, ஆ lū
ள la, ளு lu, ளூ lū	

Five additional consonants do not change their forms with -u and $-\overline{u}$, but \neg or \neg is added on the right shoulder: $\wp \neg ju$, $\wp \neg j\overline{u}$. Irregular forms of the -ai sign: $\varpi n n a \rightarrow$ $2 \varpi n n ai$; $\varpi l a \rightarrow 2 \varpi l ai$; $\arg l a \rightarrow 2 \arg l ai$; $\varpi n a \rightarrow 2 \varpi n ai$.

There are no irregular forms for the -e, $-\bar{e}$, and -au signs.

An important sign \bigcirc is a very important sign in Tamil script, for it shows the absence of the inherent *a*-vowel in consonants: $\varpi ka \rightarrow$ ϖk . In contrast to other Indian scripts, this sign is often used to denote the absence of the final vowel sound and to make conjunct consonants in ordinary Tamil sentences, where special conjunct-consonant letters are not used: $\varpi \perp \pi \sin vittan$. In the other Indian scripts this sign (hasanta) used for showing the absence of the inherent *a*-sound in consonants seldom appears in ordinary sentences.

Reading and punctuation Tamil script runs from left to right on a horizontal line, with a space between each word. Punctuation is now the same as in English.

Numerals

்க	5	Tm	Ð	ரு	С п	எ	्र	არი	Ð	M	சூ
1	2	3	4	5	6	7	8	9	10	100	1,000

Tamil numerals have no sign for zero; thus, 妊娠のの知道1980. Now only Arabic figures are used.

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Tibetan Script

Tibetan script is descended from the Indian scripts and can be understood by using the principles of the Indian writing system. Since the Tibetan language is monosyllabic, however, the spelling construction in Tibetan script is different from that in Indian scripts, which are used to represent polysyllabic languages.

Alphabet

η	Р	찌	Ľ	રુ	Φ	Ę	3
ka	kha	ga	nga	cha	chha	ja	nya
5	Я	5	ሻ	되	ধ	ち	ম
ta	tha	da	na	ра	pha	ba	ma
శ్	చే	Ę	와	ବ	Ę	٩	ч
tsa	tsa	za	wa	sha	za	'a	уа
۲	ผ	Ą	적	5		ম	
ra	la	sha	sa	ha		а	

 \mathbb{N} a is the only independent vowel.

There are also five additional letters for borrowed words:

7	B	7	ক	թ
ţa	tha	da	ņa	sha

The forms of these cerebral letters are the reverse of those of the similarly pronounced dental letters that appear in the table above.

Vowel signs

○ -a ○ -i ○ -u ○ -e ○ -oFor the letter ¶ ka: ¶ki, ¶ku, ¶ke, ¶ko. Independent vowels can be shown by attaching these vowel signs to the letter [N]a: $\widehat{N}i$, $\underline{N}u$, $\widehat{N}e$, $\widehat{N}o$.

In Tibetan originally there were no long vowels, but when they are necessary for Sanskrit or other languages, \Im ha is written small at the bottom: $\Im \bar{a}$, $\Im \bar{a}$, $\Im \bar{g} \bar{e}$, $\widetilde{\Im} m\bar{o}$.

Conjunct consonants Three preceding consonants ($\forall ra, \forall la, and \forall sa$) are written above succeeding consonants: \Re lka, \Re ska. A preceding \neg ra changes its form to \bigcirc : $\overline{\eta}$ rka (but $\overline{2}$ rnya).

Succeeding consonants (\P ya, \neg ra, \P la, \P wa, and 5 ha) are written beneath preceding consonants: \P kla, \P gha. A succeeding ya changes its form to \bigcirc , \neg ra to \bigcirc , and \P wa to \bigcirc : \P rkya, \P kra, \P kru, \P kwa.

Reading, other signs, and punctuation Tibetan script runs from left to right on a horizontal line, with a special sign (') (tseg) placed between each syllable. A Tibetan syllable consists of from one to four letters, of which one is basic. Signs of vowels and consonants are attached to the basic letter, and the other letters lose the inherent a-sounds: $\overline{A}[\Pi]$ mig. If a syllable is to end in an a sound, β is added at the end: 5⁴]' dag, but 5⁴3' dga. Tibetan pronunciations frequently do not reflect their spellings due to the silence of all consonants except the base: for example, $\neg \overline{9}$ is pronounced gye though it is spelled ba-rgya-da. Such spellings reflect the fact that Tibetan spelling has changed very little in the 1,300 years since the 7th century when Tibetan script originated.



A postage stamp from Bhutan.

(1) was a comma, and (11) was a period. Nowadays, (,) and (.) are used.

Some or some was an ornament placed at the beginning of a text or sutra. \ddot{I} was placed at the beginning of written charms.

Numerals

リ	२	३	t	ч	ঙ	N	5	η	0
1	2	3	4	5	6	7	8	9	0

Chinese Characters

Chinese characters (sometimes called pictograms or ideograms) are unique because of their special system of construction, their long history, their irregular pronunciations, and the many thousands which are used.

Construction Each Chinese character consists of one or more elements. Those consisting of one element are generally pictographic characters: β (moon), \pm (woman), \parallel (mountain), \pm (tree). A few are symbolic: \equiv (three), \pm (above), \pm (origin; the character represents the base of a tree).

In most characters consisting of two or more elements, one element indicates the phonetic value and the other the general category. Elements are juxtaposed in various ways: right and left, above and below, around and center, and so on:

被 pi (suffer) = 衣 or i (cloth) + 皮 pi

裏 ri (reverse) = 衣 (cloth) + 里 ri

袋 tai (sack) = 衣 (cloth) + 代 tai

Some characters are produced by two or more pictographic elements:

明 (bright) = \exists (sun) + \exists (moon)

森 (forest) = π (tree) + π (tree) + π (tree)

困 (be in trouble) = 木 (tree) growing in a

□ (box)

Three forms There are three forms of Chinese characters in general use. Original-form characters on the whole contain more strokes and are more clearly pictorial. They have hardly changed at all since early times. Japanese characters for daily use (called the Toyo Kanji) are of simpler construction. The most simplified forms are those developed on the mainland in recent years to speed up the educational process. Some characters in all three systems are the same. The chart gives examples of characters that differ.

F	ORMS			Sounds				
Orig.	JAP.	Simp.	CHINESE JAPANESE KOREAN		Korean			
廣	広	٢th	kuang	ko hiro-i	kwang	wide		
與	与	与	уи	yo ata-eru	уо	give		
習	習	习	shi	shu nara-u	sup	learn		
鬬	閚	斗	tou	to tataka-u	thu	fight		
專	尃	专	chuan	sen moppa-ra	chon	solely		
勸	勧	劝	chhuan	kan susu-meri	, kwon	advise		
讀	読	读	tou	doku yo-mu	tok	read		

Sounds Chinese characters are read with sounds that vary according to the language or dialect which uses them. In Japanese most characters have two or more sounds; "On" sounds are derived from original Chinese; "Kun" sounds express native Japanese words.

Meanings The meanings represented by Chinese characters are generally constant, despite the varying pronunciations given them in different languages. Some have of course changed due to historical influences.

Reading and punctuation Chinese characters are traditionally written from top to bottom in a vertical line that shifts from right to left, but nowadays many texts are written from left to right on a horizontal line. In Taiwan articles in the same newspaper may be written on a horizontal line from right to left or from left to right with no indication. There are no spaces between words. The mark $(_{\circ})$ is a period, and $(_{\cdot})$ is a comma, but $(_{\cdot})$ and $(_{\cdot})$ are also used in horizontal sentences.

Numerals

<u>-</u>	<u> </u>	Ξ	四	五	六	七	八	九	+	百	千
1	2	3	4	5	6	7	8	9	10	100	1,000

Arabic figures are now commonly used when Chinese characters are written horizontally.

Arabic Script

Arabic script may be considered Moslem writing, for the area employing it coincides with the area of Moslem influence. The Moslem holy book, the Koran, is usually written and read in Arabic. Arabic is written with twenty-eight letters and is read from right to left on a horizontal line.

Alphabet The chart on the right shows the Arabic alphabet. There is no distinction between capitals and small letters, but there are four forms, independent, initial, medial, and final, determined by where the letter appears in a word. Only the six letters $|, \rangle, \dot{\rangle}, \dot{\rangle$

Vowel signs In Arabic, vowel signs are not usually written, but when needed, can be expressed as follows:

	Short	EXAMPLE		LONG	Example	
a sound	ර -a	ب	ba	ló -ā	bā بكا	
i sound	Ş -i	ر	bi	آ- رِي	bī بِي	
u sound						
Two dipl	nthongs a	re:	۞ي	- <i>ai</i> and	.au ⊙و	

Other signs $\raiset{0}$ shows the absence of a vowel: $b. \raiset{0}$ shows a double consonant: كَشَرَ kassara. indicates a glottal stop on |, ϱ , and ϑ .

Ligatures The many ligatures used in Arabic script make it a difficult language to learn to read. In printing, $\bigvee (l+a)$ and $\ddot{o}(t+h)$ are used frequently.

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Indep. form	Initial form	Medial fo r m	Final form	PHONETIC VALUE	Numer. value
1			t	а	1
ب	:	:	ب	Ь	2
ت	ï	ï	ټ	t	400
ت ث ج ج د ح . ح	÷	∴ ▲	ث	t	50 0
で	~	~	ج	j	3
٢	>	∞	で	x	8
さ	÷	ż	Ċ	kh	600
د			で、こ、こ	d	4
ذ				dh	700
ر			و	r	200
ر ن س س ل او ق ن ع ع ط ط ض س ش			ز ش ض ط	z	7
٣		***	س	5	60
ش	نثر	ii.	ش	sh	300
ص		-4	ص	5	90
ض	i	à	ۻ	d	800
ط	ط	ط	h	t	9
ظ	ظ	ظ	ظ	z	900
ع	ء		Ċ	(')	70
ė	ż	ż	ح ف	gh	1,000
ف	į	à		ſ	80
ق	ë	Ä	ق	q	100
ف	5	5	ق ك	k	20
J	J	٢	لل	1	30
٢	*	*	٢	m	40
ن	;	:	ن	n	50
•	A	r (٩	h	5
و	و		و	w,u :	6
ى	!	.	ي ی	y,i	10

Numerals Arabic figures are written from right to left, but the figure written to the left shows the higher value: 17 23.

١	۲	٣	٤	٥	٦	۷	٨	٩	٩
1	2	3	4	5	6	7	8	9	0