A Calligraphers Guide to Other Writing Systems

Pick any language you like: Arabic, Chinese, Japanese, Cyrillic, Norse or Hebrew. Each is based on a different writing system, which makes it interesting to understand how they work. This section will cover five categories of writing systems. This may sound tedious and academic, but it's not. If you take the time to understand them, you'll find that they all give us something special.

East Asian Writing Systems

Obviously, the Chinese uses Chinese characters (where they are known as hanzi). But Chinese characters are also used in various forms in Japanese (where they are known as kanji) and Korean (hanja). In this section, we will look at East Asian writing systems.

Chinese Calligraphy

Chinese characters are symbols that do not comprise an alphabet. This writing system, in which each character generally represents either a complete one-syllable word or a single-syllable part of a word, is called logo-syllabic. This also means that each character has its own pronunciation, and there is no way to guess it. Add to this the fact that being literate in Chinese requires memorizing about 4,000 characters and you've got quite a writing system to learn. Fortunately, one doesn't need to learn Chinese in order to appreciate the beauty of its writing.

Many commonly used Chinese characters have 10 to 30 strokes, certain stroke orders have been recommended to ensure speed, accuracy and legibility in composition. When learning a character, one has to learn the order in which it is written, and the sequence has general rules, such as: top to bottom, left to right, horizontal before vertical, middle before sides, left-falling before right-falling, outside before inside, inside before enclosing strokes. This becomes the bases for drawing the characters.

THE EIGHT PRINCIPLES OF YONG

The strokes in Chinese characters fall into eight main categories: horizontal (–), vertical (|), left-falling (⁄), right-falling (\\), rising, dot (`), hook (⌋) and turning (⌒ , ⌊, Z, etc.).

The "Eight Principles of Yong" outlines how to write these strokes, which are common in Chinese characters and can all be found in the symbol for "Yong", (永) which translates as "forever" or "permanence". It was believed that practicing these principles frequently as a budding calligrapher would ensure beauty in one's writing.

THE FOUR TREASURES

This is an expression that refers to the brush, ink, paper and ink stone used in Chinese and other East Asian calligraphic traditions. The head of the brush can be made of the hair (or feather) of a variety of animals, including wolf, rabbit, deer, chicken, duck, goat, pig and tiger. The Chinese and Japanese also have a tradition of making a brush from the hair of a newborn, as a once-in-a-lifetime souvenir for the child. The artist usually completes their work of calligraphy by adding their seal at the very end, in red ink. The seal serves as a signature and is usually done in an old style.

Chinese Seal and Seal paste
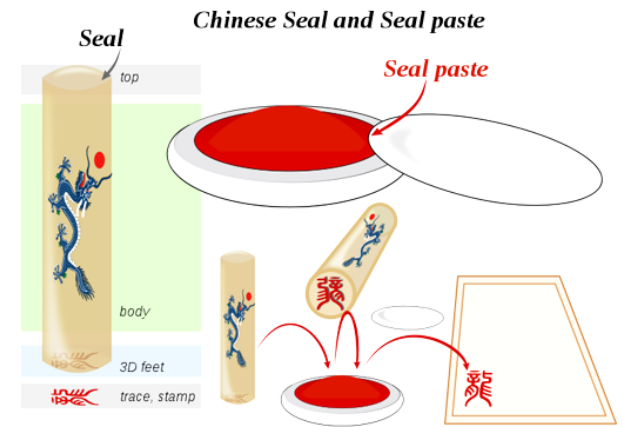
HORIZONTAL & VERTICAL WRITING

Many East Asian scripts (such as Chinese, Japanese and Korean) can be written horizontally or vertically, because they consist mainly of disconnected syllabic units, each conforming to an imaginary square frame. Traditionally, Chinese is written in vertical columns from top to bottom; the first column on the right side of the page, and the text starting on the left. For beginners, the paper is set with a grid pattern to keep them on track and the authors stamp is usually places on the bottom left side.

Signs are particularly challenging for written Chinese, because they can be written either left to right or right to left (the latter being more of a traditional layout, as well as top to bottom. Titles or larger characters are usually not done traditionally, making it even harder to pick out a title or important fact.

In Chinese calligraphy, Chinese characters can be written in five major styles. These styles are intrinsic to the history of Chinese script.

Seal script is the oldest style and continues to be widely practiced, although most people today cannot read it. It is considered an ancient script, generally not used outside of calligraphy or carved seals, hence the name.

In clerical script, characters are generally "flat" in appearance. They are wider than the seal script and the modern standard script, both of which tend to be taller than wider. Some versions of clerical are square, and others are wider. Compared to seal script, forms are strikingly rectilinear; but some curvature and influence from seal script remains.

The semi-cursive script approximates normal handwriting, in which strokes and (more rarely) characters are allowed to run into one another. In writing in the semi-cursive script, the brush leaves the paper less often than with the regular script. Characters appear less angular and rounder. The characters are also bolder.

The cursive script is a fully cursive script, with drastic simplifications and ligatures, requiring specialized knowledge to be read. Entire characters may be written without lifting the brush from the paper at all, and characters frequently flow into one another. Strokes are modified or eliminated completely to facilitate smooth writing and create a beautiful abstract appearance. Characters are highly rounded and soft in appearance, with a noticeable lack of angular lines.

The regular script is one of the last major calligraphic styles to develop from a neatly written early-period semi-cursive form of clerical script. As the name suggests, this script is "regular," with each stroke written slowly and carefully, the brush being lifted from the paper and all strokes distinct from each other.

Japanese

Japanese is syllabic, meaning that each symbol represents (or approximates) a syllable, combining to form words. No full-fledged script for written Japanese existed until the development of Man'yogana (万葉仮名), an ancient writing system that employs Chinese characters to represent the Japanese language. The Japanese appropriated Kanji (derived from their Chinese readings) for their phonetic value rather than semantic value.

The modern kana systems, Hiragana and Katakana, are simplifications and systemizations of Man'yogana. Thus, the modern Japanese writing system uses three main scripts: Kanji, which is used for nouns and stems of adjectives and verbs; Hiragana, which is used for native Japanese words and written in the highly cursive flowing sosho style; and Katakana, which is used for foreign borrowings and was developed by Buddhist monks as a shorthand. In Japan, cursive script has traditionally been considered suitable for women and was called

women's script (onnade), while clerical style has been considered suitable for men and was called men's script (otokode).. To make matters confusing the three scripts are often mixed together in a single sentence.

MAN'YOGANA TO KANA

As we can see, the modern kana systems are simplifications of Man'yogana. It is interesting to see how they have been simplified.

无	和	良	也	末	波	奈	太	左	加	安
无	和和	良ら	也	末ま	波は	奈な	太た	左さ	加か	安あ
ゑ	わ	ら	や	ま	は	な	た	さ	か	あ
ん	為	利		美	比	仁	知	之	機	以
	為ね	利利		美み	比ひ	仁に	知ち	之し	機き	以い
	る	り		み	ひ	に	ち	し	き	い
		留	由	武	不	奴	川	寸	久	宇
		留る	由ゆ	武む	不ふ	奴ぬ	川つ	寸す	久く	宇う
		る	ゆ	む	ふ	ぬ	つ	す	く	う
	恵	礼		女	部	祢	天	世	計	衣
	恵ゑ	礼れ		女め	部へ	祢ね	天て	世せ	計け	衣え
	ゑ	れ		め	へ	ね	て	せ	け	え
遠	呂	与		毛	保	乃	止	曽	己	於
遠を	呂ろ	与よ		毛も	保ほ	乃の	止と	曽そ	己こ	於お
を	ろ	よ		も	ほ	の	と	そ	こ	お

The top row in the illustration above is Chinese Man'yogana characters with the center row being the Japanese transitional system to Kana and the bottom row is modern Kana.

HIRAGANA FROM MAN'YOGANA

ア 阿	イ 伊	ウ 宇	エ 江	オ 於
カ 加	キ 幾	ク 久	ケ 介	コ 己
サ 散	シ 之	ス 須	セ 世	ソ 曽
タ 多	チ 千	ツ 川	テ 天	ト 止
ナ 奈	ニ 仁	ヌ 奴	ネ 祢	ノ 乃
ハ 八	ヒ 比	フ 不	ヘ 部	ホ 保
マ 末	ミ 三	ム 牟	メ 女	モ 毛
ヤ 也		ユ 由		ヨ 与
ラ 良	リ 利	ル 流	レ 礼	ロ 呂
ワ 和				ヲ 乎
ン 尓				

Katakana, with man'yogana equivalents. (The segments of man'yogana adapted into katakana are highlighted.)

VIETNAMESE

The Vietnamese writing system in use today (called Chyu Quô'c Ngnyu) is adapted from the Latin alphabet, with some digraphs (i.e. pairs of characters used to write individual phonemes) and nine additional diacritics (accent marks) for tones and certain letters. Over the course of several

centuries—from 1527, when Portuguese Christian missionaries began using the Latin alphabet to transcribe the Vietnamese language, to the early 20th century, when the French colonial administration made the Latin-based alphabet official—the Chinese character-based writing systems for Vietnamese gradually became limited to a small number of scholars and specialists.

However, the Chinese philosophy still exerts a strong influence. The stylized work is by painter Tran Dat, who introduced a harmony between the shapes of Chinese and Vietnamese characters. If you rotate the first image 90 degrees counter-clockwise, you can make out the Vietnamese words. It is meant to be displayed vertically so that it appears as ancient Chinese text at first.
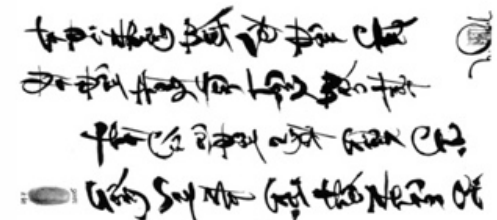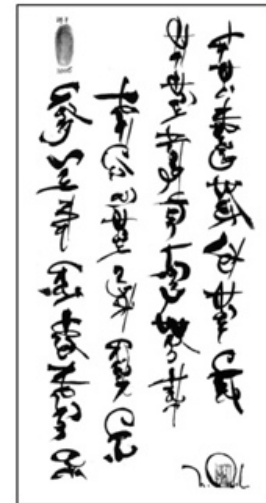
Korean Hangul (Squares)

ㄱ	ㄲ	ㄴ	ㄷ	ㄸ	ㄹ	ㅁ	ㅂ	ㅃ
k	kk	n	t	tt	r	m	p	pp

ㅅ	ㅆ	ㅇ	ㅈ	ㅉ	ㅊ	ㅋ	ㅌ	ㅍ	ㅎ
s	ss	ng	ch	jj	ch'	k'	t'	p'	h

ㅏ	ㅐ	ㅑ	ㅒ	ㅓ	ㅔ	ㅕ	ㅖ	ㅗ
a	æ	ya	yæ	eo	e	yeo	ye	o

ㅘ	ㅙ	ㅚ	ㅛ	ㅜ	ㅝ	ㅞ	ㅟ	ㅠ
wa	wæ	we	yo	u	wo	we	wi	yu

ㅡ	ㅢ	ㅣ
eu	eui	i

Korean is itself a very different writing system. It uses Hangul, a "featural" writing system. The shapes of the letters are not arbitrary but encode phonological features of the phonemes they represent. Hangul has existed since the middle of the 15th century (approximately 1440). But tradition prevailed, and scholars continued to use Classical Chinese as the literary language, and it was not until 1945 that Hangul became popular in Korea.

Jamo, or natsori, are the units that make up the Hangul alphabet. "Ja" means letter or character, and "mo" means mother, suggesting that the jamo are the building blocks of the script. When writing out words, signs are grouped by syllables into squares. The layout of signs inside the square depends greatly on the syllable structure as well as which vowels are used.

Korean Hangul characters below are grouped together in a square to form words.

The common ligature letters represent the sounds of the Hangul symbols.

+	ㄱ g	ㄴ n	ㄷ d	ㄹ r	ㅁ m	ㅂ b	ㅅ s	ㅇ o	ㅈ j	ㅊ ch	ㅋ k	ㅌ t	ㅍ p	ㅎ h
ㅏ a	가 ga	나 na	다 da	라 ra	마 ma	바 ba	사 sa	아 a	자 ja	차 cha	카 ka	타 ta	파 pa	하 ha
ㅑ ya	갸 gya	냐 nya	댜 dya	랴 rya	먀 mya	뱌 bya	샤 sya	야 ya	쟈 jya	챠 chya	캬 kya	탸 tya	퍄 pya	햐 hya
ㅓ eo	거 geo	너 neo	더 deo	러 reo	머 meo	버 beo	서 seo	어 eo	저 jeo	쳐 cheo	커 keo	터 teo	퍼 peo	허 hya
ㅕ yeo	겨 gyeo	녀 nyeo	뎌 dyeo	려 ryeo	며 myeo	벼 byeo	셔 syeo	여 yeo	져 jyeo	쳐 chyeo	켜 kyeo	텨 tyeo	펴 pyeo	혀 hyeo
ㅗ o	고 go	노 no	도 do	로 ro	모 mo	보 bo	소 so	오 o	조 jo	초 cho	코 ko	토 to	포 po	호 ho
ㅛ yo	교 gyo	뇨 nyo	됴 dyo	료 ryo	묘 myo	뵤 byo	쇼 sya	요 yo	죠 jyo	쵸 chyo	쿄 kyo	툐 tyo	표 pyo	효 hyo
ㅜ u	구 gu	누 nu	두 du	루 ru	무 mu	부 bu	수 su	우 u	주 ju	추 chu	쿠 ku	투 tu	푸 pu	후 hu
ㅠ yu	규 gyu	뉴 nyu	듀 dyu	류 ryu	뮤 myu	뷰 byu	슈 syu	유 yu	쥬 jyu	츄 chyu	큐 kyu	튜 tyu	퓨 pyu	휴 hyu
ㅡ eu	그 geu	느 neu	드 deu	르 reu	므 meu	브 beu	스 seu	으 eu	즈 jeu	츠 cheu	크 keu	트 teu	프 peu	흐 heu
ㅣ i	기 gi	니 ni	디 di	리 ri	미 mi	비 bi	시 si	이 i	지 ji	치 chi	키 ki	티 ta	피 pi	히 hi
ㅐ ae	개 gae	내 nae	대 dae	래 rae	매 mae	배 bae	새 sae	애 ae	재 jae	채 chae	캐 kae	태 tae	퍠 pae	해 hae

The rules are very detailed, logical regimented, and here is an example for inspiration.

$$\text{꺼} + \text{ㅐ} + \text{ㄹㅍ} \longrightarrow \text{꺪}$$
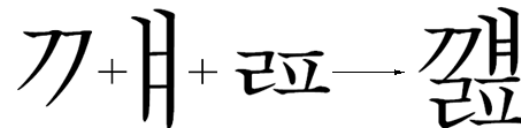
Sini

Sini is a Chinese Islamic calligraphic form for the Arabic script. It can refer to any type of Chinese Islamic calligraphy but is commonly used to refer to one with thick tapered effects, much like Chinese calligraphy. It is used extensively in eastern China, one of whose famous Sini calligraphers is Hajji Noor Deen.

Arabic

Arabic lettering, which has many styles and techniques, was developed from the Nabataean script (which was itself derived from the Aramaic sc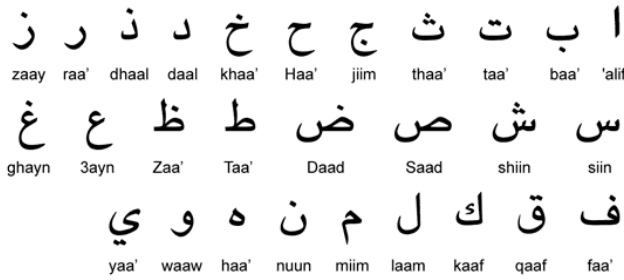ript) and contains a total of 28 letter. These 28 letters come from 18 basics shapes, to which one, two or three dots are added, above or below the letter. Arabic uses a writing system that we haven't seen
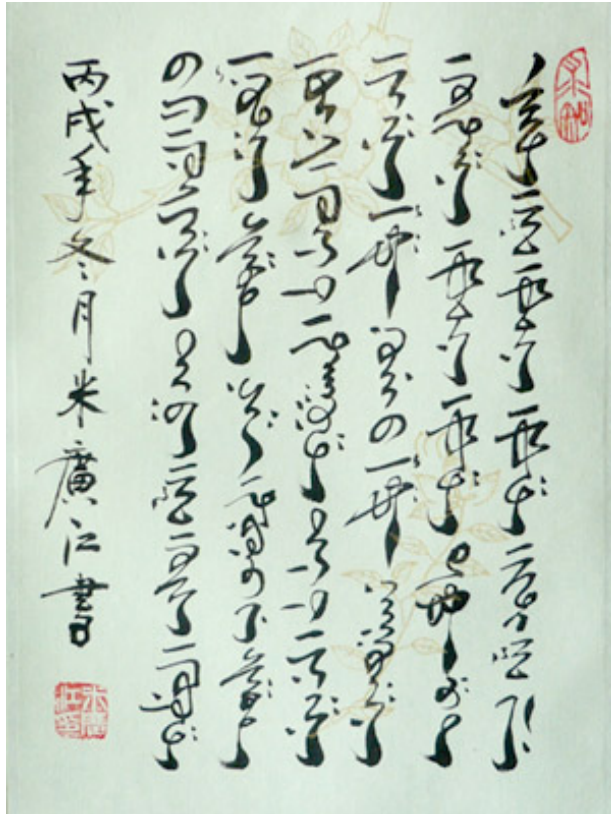
yet: an abjad, which is basically an alphabet that doesn't have any vowels—the reader must supply them.

ز	ر	ذ	د	خ	ح	ج	ث	ت	ب	ا
zaay	raa'	dhaal	daal	khaa'	Haa'	jiim	thaa'	taa'	baa'	'alif

غ	ع	ظ	ط	ض	ص	ش	س
ghayn	3ayn	Zaa'	Taa'	Daad	Saad	shiin	siin

ف	ق	ك	ل	م	ن	ه	و	ي
yaa'	waaw	haa'	nuun	miim	laam	kaaf	qaaf	faa'

The Arabic alphabet consists of 28 letters, reading from right to left. Shown above are the basic forms of the letters.

Contextual Shaping

The shape of these letters changes depending on their position in the word (isolated, initial, medial or final). Here, for example, is the letter kaaf:

ك	ك	لك
initial	medial	final

Diacritics

The Arabic script is an impure abjad, though. Short consonants and long vowels are represented by letters, but short vowels and long consonants are not generally indicated in writing. The script includes numerous diacritics, which serve to point out consonants in modern Arabic. These are beautiful details and worth taking a long look.

جَلَسَ الشَّيْخُ نَصْرُو

Alif as a Unit of Proportion

Geometric principles and rules of proportion play an essential role in Arabic calligraphy. They govern the first letter of the alphabet, the alif, which is basically a straight vertical stroke.

The height of the alif varies from 3 to 12 dots, depending on the calligrapher and style of script.

The width of the alif (the dot) is a square impression formed by pressing the tip of the reed pen to paper. Its appearance depends on how the pen was cut and the pressure exerted by the fingers.

The imaginary circle, which uses alif as its diameter, is a circle within which all Arabic letters could fit.
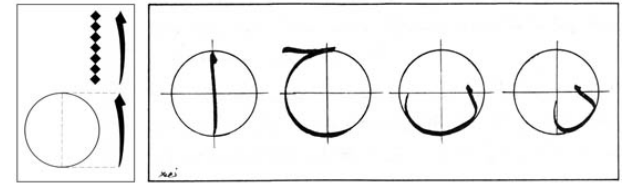
Many Arabic Styles

Arabic script has many different styles—over 100 in fact. But there are six primary styles, which can generally be distinguished as being either geometric (basically Kufic and its variations) and cursive (Naskh, Ruq'ah, Thuluth, etc.).

As a written language that is used within a religion that has outlawed the use of realistic portrayals of faces and religious figures, the written language has become a from of expression and ornamentation. As a result, the many styles have evolved and been favored over different times by different dynasties and regions. The following page has some of the recognized styles and examples of them.

Kufi (or Kufic) is noted for its proportional measurements, angularity and square-ness.

Tuluth means "one third," referring to the proportion of the pen relative to an earlier style called Tumaar. It is notable for its cursive letters and use as an ornamental script.

Nasakh, meaning "copy," is one of the earliest scripts with a comprehensive system of proportion. It is notable for its clarity for reading and writing and was used to copy the Qur'an.

Ta'liq means "hanging," in reference to the shape of the letters. It is a cursive script developed by the Persians in the early part of the 9th century AD. It is also called Farsi (or Persian).

Diwani was developed by the Ottomans from the Ta'liq style. This style became a favorite script in the Ottoman chancellery, and its name is derived from the word "Diwan," which means "royal court." Diwani is distinguished by the complexity of lines within letters and the close juxtaposition of letters within words.

Riq'a is a style that evolved from Nasakh and Thuluth. It is notable for the simplicity and small movements that are required to write in it, thanks to its short horizontal stems, which is why it is the most common script for everyday use. It is considered a step up from the Nasakh script, which children are taught first. In later grades, students are introduced to Riq'a.

TECHNIQUES

The development of Arabic calligraphy led to several decorative styles that were intended to accommodate special needs or tastes and to please or impress others. Here are a few outstanding techniques and scripts.

Gulzar is defined by Safadi (1979) in Islamic calligraphy as the technique of filling the area within the outlines of relatively large letters with various ornamental devices, including floral designs, geometric patterns, hunting scenes, portraits, small script and other motifs. Gulzar is often used in composite calligraphy, where it is also surrounded by decorative units and calligraphic panels.

Maraya or muthanna is the technique of mirror writing, where the composition on the left reflects the composition on the right.

Tughra is a unique calligraphic device that is used as a royal seal. The nishanghi or tughrakesh is the only scribe trained to write tughra. The emblems became quite ornate and were particularly favored by Ottoman officialdom. The example below breaks down the name into the symbols through colorization.

Mahmud Han bin Abdulhamid muzaffer daima

In zoomorphic calligraphy, the words are manipulated into the shape of a human figure, bird, animal or object.

MATERIALS USED

The traditional instrument of the Arabic calligrapher is the qalam, a pen made of dried reed or bamboo. "The traditional way to hold the pen," wrote Safadi in 1987, "is with middle finger, forefinger and thumb well spaced out along the pen's shaft. Only the lightest possible pressure is applied."

As for the ink, you have many options: black and brown (often used because their intensity and consistency can be varied greatly) as well as yellow, red, blue, white, silver and gold. The important thing is that the greater strokes of the composition be very dynamic in their effect.

PERSO-ARABIC SCRIPT

The predominant style in Persian calligraphy has traditionally been the Nasta'liq script. Although it is sometimes used to write Arabic-language text (where it is known as Ta'li, with Farsi used mainly for titles and headings), it has always been more popular in Persian, Turkic, and South Asian spheres. It is extensively practiced as a form of art in Iran, Pakistan and Afghanistan. Nasta'liq means "suspended," which is a good way to describe the way each letter in a word is suspended from the previous one (i.e. lower, rather than on the same level).

The Perso-Arabic script is exclusively cursive.

That is, the majority of letters in a word connect to each other. This feature is also included on computers. Unconnected letters are not widely accepted. In Perso-Arabic, as in Arabic, words are written from right to left, while numbers are written from left to right. To represent non-Arabic sounds, new letters were created by adding dots, lines and other shapes to existing letters.

Indic Scripts (Brahmic)

The Indic or Brahmic scripts are the most extensive family of writing systems that we haven't looked at yet: abugidas. An abugidas is a segmental writing system which is based on consonants and in which vowel notation is obligatory but secondary. This contrasts with an alphabet proper (in which vowels have a status equal to that of consonants) and with an abjad (in which vowel marking is absent or optional).

Indic scripts are used throughout South Asia, Southeast Asia and parts of Central and East Asia (e.g. Hindi, Sanskrit, Konkani, Marathi, Nepali, Sindhi and Sherpa). They are so widespread that they vary a lot, but Devanagari is the most important one.

Devanagari Ligatures & Matra

Hindi and Nepali are both written in the Devanagar alphabet. Devanagari is a compound word

with two roots: deva, meaning "deity," and nagari, meaning "city." Together, they imply a script that is both religious and sophisticated.

To represent sounds that are foreign to Indic phonology, additional letters have been coined by choosing an existing Devanagari letter that represents a similar sound and adding a dot (called a nukta) beneath it. It is written from left to right, lacks distinct letter cases and is recognizable by a distinctive horizontal line running along the tops of the letters and linking them together.

In addition, a few other diacritics are used at the end of words, such as the dots illustrated below and the diagonal line, called virama, drawn under the last letter of a word if it is a consonant. One interesting aspect of Brahmic and in particular of Devanagari here is the horizontal line used for

successive consonants that lack a vowel between them. They may physically join together as a "conjunct," or ligature, a process called samyoga (meaning "yoked together" in Sanskrit). Sometimes, the individual letters can still be discerned, while at other times the conjunction creates new shapes.

Note that a letter in Devanagari has the default vowel of "a". To indicate the same consonant followed by another vowel, additional strokes are

added to the consonant letter. These strokes are called matras, or dependant forms of the vowel.

Thai Stacking Diacritics

The writing system of Thai is based on Pali, Sanskrit and Indian concepts, and many Mon and Khmer words have entered the language.

To represent a vowel other than the inherent one, extra strokes or marks are added around the basic letter. Thai has its own system of diacritics derived from Indian numerals, which denote different tones. Interestingly, like many non-Roman scripts, it has stacking diacritics.
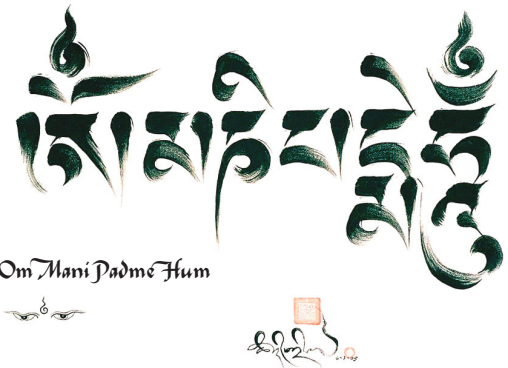
Tibetan Mantras

The form of Tibetan letters is based on an Indic alphabet of the mid-7th century. The orthography has not altered since the most important ortho-graphic standardization, which took place during the early 9th century. The spoken language continues to change. As a result, in all modern Tibetan dialects, there is a great divergence of reading from the spelling.

The Tibetan script has 30 consonants, otherwise known as radicals. Syllables are separated by a tseg ` , and because many Tibetan words are monosyllabic, this mark often functions almost as a space.

ka	kha	ga	ṅa
tša	tšha	dža	ña
ta	tha	da	na
pa	pha	ba	ma
tsa	tsha	dza	
wa	ža	za	
'a	ya	ra	la
	ša	sa	
ha	a		

As in other parts of East Asia, nobles, high lamas and persons of high rank were expected to have strong abilities in calligraphy. But the Tibetan script was done using a reed pen instead of a brush. As for a mantra, it is a sound, syllable, word or group of words that is considered capable of "creating transformation."

~Om Mani Padme Hum

The use of mantras is widespread throughout spiritual movements that are based on or off-shoots of practices from earlier Eastern traditions and religions. The mantras used in Tibetan Buddhist practice are in Sanskrit, to preserve the original mantras. Visualizations and other practices are usually done in the Tibetan language.

Vajrasattva mantra

Hebrew

The Hebrew alphabet is a descendant of the Aramaic alphabet, which is itself a descendant of the Phoenician alphabet. Like Arabic, the Hebrew alphabet is an abjad in its traditional form (i.e. an alphabet consisting only of consonants), written from right to left. It has 22 letters, 5 of which have different forms at the end of a word (called "sofit"). The Hebrew alphabet has only one case, so capitalization is not used, and it is often called the "alefbet" because of its first two letters.

א	'alep	'	ל	lamed	l
ב	bet	b	מם	mem	m
ג	gimel	g	נן	nun	n
ד	dalet	d	ס	samek	s
ה	he	h	ע	ayin	'
ו	waw	w	פף	pe	p
ז	zayin	z	צץ	tsade	ṣ
ח	het	ḥ	ק	qop	q
ט	tet	ṭ	ר	reš	r
י	yod	y	ש	šin	š
כ	kap	k	ת	taw	t

Diacritics

Again like Arabic, modern Hebrew orthography includes several types of diacritics as aids to pronunciation. These are written above, below or inside the letter, in ways that do not alter the spacing of the line. Text containing these markings is referred to as "pointed" text and contains three types of marks:

The niqqud (points) are used most. They represent vowels or are used to distinguish between alternative pronunciations of several letters of the alphabet.

The geresh (indicating initialisms) and the gershayim (indicating acronyms) are diacritics that affect pronunciation. They are also used to denote Hebrew numerals but are not considered part of the niqqud.

The cantillation are accents that show how Biblical passages should be chanted and that sometimes function as punctuation.
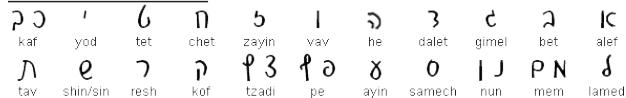
וַיֹּאמֶר אֱלֹהִים יִקָּווּ הַמַּיִם

Letters are in black, points in red and cantillation in blue.

WRITINGS IN HEBREW

Hebrew can be written in three main scripts:

Cursive Hebrew

|										
kaf	yod	tet	chet	zayin	vav	he	dalet	gimel	bet	alef
tav	shin/sin	resh	kof	tzadi	pe	ayin	samech	nun	mem	lamed

Used almost exclusively when handwriting in modern Hebrew, because it is faster to write than traditional Hebrew.

Rashi

A semi-cursive script used in books for editorial insertions or biblical commentary. (Named after Rashi, one of the great medieval Jewish scholars and biblical commentators.)

Block
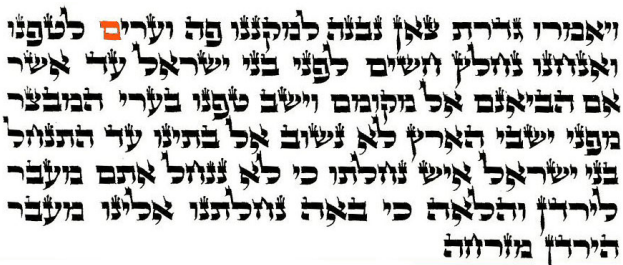
Used mostly in books. A stylized form of the Aramaic script.

GEMATRIA

Gematria (Greek: meaning geometry) is an Assyro-Babylonian-Greek system of code and numerology later adopted into Jewish culture that assigns numerical value to a word or phrase in the belief that words or phrases with identical numerical values bear some relation to each other or bear some relation to the number itself as it may apply to nature, a person's age, the calendar year, or the like.

Similar systems, some of which were derived from or inspired by Hebrew gematria, have been used in other languages and cultures. In Hebrew, each letter is also used to denote numbers. One interesting thing about Hebrew is "Gematria," the system of assigning numerical value to a word or phrase, in the belief that words or phrases with identical numerical values bear some relation to each other. The best-known example is the Hebrew word "Chai" (meaning "life"), which is composed of two letters that add up to 18. For this reason, 18 is a spiritual number in Judaism, and many Jews give gifts of money in multiples of 18.

Chai

The word "Chai" is composed of the two letters: Chet (n) and Yod (').

There are 22 solid figures composed of regular polygons (5 Platonic solids, 4 Kepler-Poinsot solids and 13 Archimedean solids). Because the Hebrew alphabet has 22 letters, we can infer a correspondence between these two seemingly unrelated categories. The art of gematria is knowing which solid to associate with which letter.

This system is used to gain insight into related concepts and to find correspondence between words and concepts. According to most practitioners, there are several methods of calculating the numerical value of individual words and phrases. When converted to a number, a word or phrase can then be compared to another word or phrase, from which a similarity can be identified.
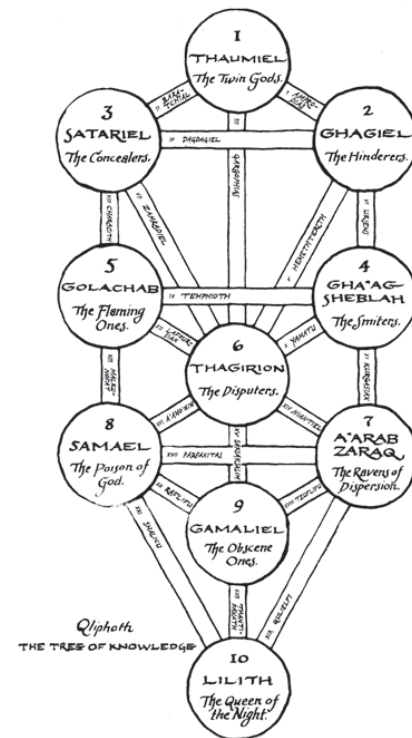
Hebrew Calligraphy

Over 150 laws govern how the Hebrew alphabet can be written by a Jewish scribe. Needless to say, they won't be listed here, but a few are below, including the standard for writing the letter "tsadi," which consists of the letters Yud and Nun.

THREE CROWNS ON the head

TWO HEADS must not touch each other

THE RIGHT CROWN must resemble the "IOD" letter form and turned a bit in a clockwise direction

THE LEFT HEAD is square, just like in the "ZAIN" letter

THE "IOD" leg links the "NOON" neck

THE "NOON" neck comes out of the middle of the lower head line

THE ROUNDED conjunction of the neck and "NOON" basement

THE "NOON" basement is on the left of its head vertical projection

European Alphabets

These alphabets were derived from the Phoenician/Etruscan/Roman based cultures and are now used worldwide. In these languages, each letter is a part of a word or simple sound, that when strung together, form words.

Latin (Roman)

The basic modern Latin alphabet (containing 26 letters, possibly also used in combination with diacritics) is the best known of the Latin alphabets. The writing system is not only the most used in Europe but is the most widely used alphabetic writing system in the world today. Consequently, we have many Latin-derived alphabets.

Some languages have fewer than 26 letters, such as the Italian alphabet, which has only 21 letters (thanks to the person who pointed this out in a comment). Most Latin-derived alphabets use the basic 26 letters, plus extensions. Diacritics are the most common way to extend the alphabet, but not the only way, as we will see.

DIACRITICS

One way to extend the basic alphabet is by adding diacritics to existing letters, a practice followed by most Latin-based languages (English pretty much being the exception). The illustration below is from the very interesting article "On Diacritics" from I Love Typography, showing various diacritics in use.

Àà	Áá	Ãã	Āā	Ăă
GRAVE	ACUTE	TILDE	MACRON	BREVE

Đđ	Êê	Ěě	Ęę	Ëë
BAR	CIRCUMFLEX	CARON	OGONEK	UMLAUT

Ģģ	Łł	Şş	Ůů	Űű
COMMA ACCENT	SLASH	CEDILLA	RING	DOUBLE ACUTE ACCENT

LIGATURES

Joining multiple letters to make ligatures

Another way to extend the alphabet is by joining multiple letters to make ligatures. Fusing two or more ordinary letters creates a new glyph or character.
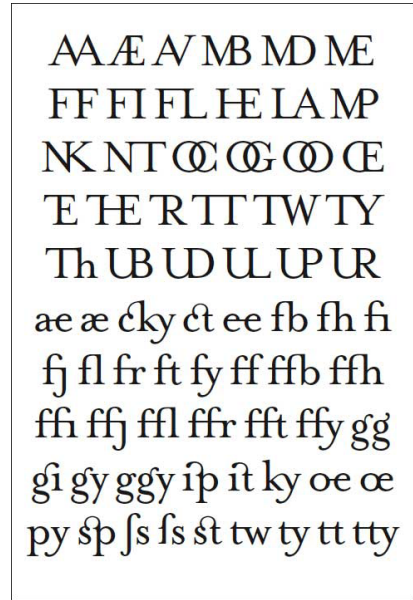
DIAGRAPHS & TRIGRAPHS

These are pairs and triplets of letters to which a special function has been assigned. They are not proper characters and do not correspond to the value you would get by combining two or three characters normally. Rather, they are pairs or triplets of letters with a special function.

Rain
Play
School
Church
Through

Collating

The question arises: how to sort all these modified letters? This is where collating comes in handy. Collation is the assemblage of written information into a standard order. One common type of collation is alphabetization, although collation is not limited to ordering letters of the alphabet.

These additional letters can be regarded as distinct new letters and are assigned specific positions in the alphabet (such as the symbols Å, Ä and Ö in Swedish):

A · B · C · D · E · F · G · H · I · J · K · L · M · N · O · P · Q · R · S · T · U · V · W · X · Y · Z · Å · Ä · Ö

In other cases, especially with letter-diacritic combinations, extensions are identified by their base letter (as with Ä, Ö, Ü and ß in German).

A · B · C · D · E · F · G · H · I · J · K · L · M · N · O · P · Q · R · S · T · U · V · W · X · Y · Z(+Ä · Ö · Ü · ß)

To complicate things further, there are languages in which certain extensions are regarded as new letters and others are not. For example, in Spanish, the character Ñ is considered a distinct letter and is sorted between N and O in the dictionary; but the accented vowels Á, É, Í, Ó, Ú are not distinct from the unaccented vowels A, E, I, O, U, respectively.

A · B · C · D · E · F · G · H · I · J · K · L · M · N · Ñ · O · P · Q · R · S · T · U · V · W · X · Y · Z(+ Á · É · Í · Ó · Ú · Ü)

Latin Typefaces

The Latin typestyle is used in many cultures and across a huge variety of applications and times. As a result, many forms have been created to convey emotional, business, cultural and visual impact. In addtion to the thousands of typestyles, color and combinations of colors can further add impact to the message.

Here are some samples of the varied letterforms that exist.

Storefront
Coffee
Aeropark

abcdefghijklmn
opqrstuvwxyz

Ff

Domino   DS Hansen   FAKTOS

DS Fette Kanzlei   EPOQUE   Germania

DS Chocolade   DS HOLZSCHRIFT   Hansa

Shinzen Stroke   My Fault   DS Admiral

Faranvale   GRINDER   DiGiTREE   GLOBUS

BLOCKED ARTISTRY   Merri Gables   Gorilla

BRAZILIA   TERRAZAN   Herkules

MANGAGE   Zarpie   DRIFTWOOD   KASHMIR

PRISMA   GOUDY TWENTY

VERVE   ROMANTIQUES

HOEDOWN   RELIEF GROTESK   Menuetto

ABCDEFGHIJKLM

Cyrillic

The Cyrillic alphabet was developed by the Slavs in Bulgaria in the 9th century. It is based on the system of Greek capital letters, augmented by ligatures and consonants from the older Glagolitic alphabet to account for sounds not found in the Greek.

The early Cyrillic alphabet came to dominate over Glagolitic in the 12th century. Since its creation, it has adapted to changes in the spoken language and developed regional variations to suit the features of national languages. Variations of the Cyrillic alphabet are used nowadays for languages throughout Eastern Europe and Asia.

It is interesting how different some of these letters can be depending on whether they're written in regular or italic cursive:

абвгдежзийклмнопрстуфхцчшщъыьэюя
абвгдежзийклмнопрстуфхцчшщъыьэюя

Likewise, uppercase, small caps and lowercase can be quite different:

ABCDEFGHıJKLMNOPQRSTUVWXYZ
ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡϹΣΤΥΦΧΨΩ
АБВГДЕЖЗИЙклмнопрстуфхцч...

Armenian

The Armenian alphabet has been used for the Armenian language since the 5th century. Until the 19th century, the Armenian language had only one written form: Old Armenian. Since then, phonological changes have split it into two dialects: Eastern and Western Armenian.

Today, Schools teach only the Eastern dialect as the written form because it is closer to the historical Old Armenian form, even though the Western dialect is more widely spoken. The following chart shows the alphabet, with its Eastern (EA) and Western (WA) phonetic values:

letter	name	EA	WA	letter	name	EA	WA
Ա ա	aib	a	a	Մ մ	mem	m	m
Բ բ	ben	b	pʰ	Յ յ	hi	y	y
Գ գ	gim	g	kʰ	Ն ն	nu	n	n
Դ դ	da	d	tʰ	Շ շ	ša	š	š
Ե ե	yeⁱž	e, ye-	e, ye-	Ո ո	vo	o, vo-	o, vo-
Զ զ	za	z	z	Չ չ	čʰa	čʰ	čʰ
Է է	e	e	e	Պ պ	pe	p	b
Ը ը	ətʰ	ə	ə	Ջ ջ	ǰe	ǰ	čʰ
Թ թ	tʰo	tʰ	tʰ	Ռ ռ	rra	rr	rr
Ժ ժ	že	ž	ž	Ս ս	se	s	s
Ի ի	ini	i	i	Վ վ	vev	v	v
Լ լ	lyun	l	l	Տ տ	tyun	t	d
Խ խ	xe	x	x	Ր ր	re	r	r
Ծ ծ	tsa	ts	dz	Ց ց	tsʰo	tsʰ	tsʰ
Կ կ	ken	k	g	Ւ ւ	hyun	v, u	v, u
Հ հ	ho	h	h	Փ փ	pʰyur	pʰ	pʰ
Ձ ձ	dza	dz	ts	Ք ք	kʰe	kʰ	kʰ
Ղ ղ	ɣad	ɣ	ɣ	Օ օ	o	o	o
Ճ ճ	če	č	ǰ	Ֆ ֆ	fe	f	f

Punctuation

Punctuation in Armenian is quite interesting, because it is completely different than what we are used to:

| Exclamation mark | Comma | Emphasis mark | Question mark | Hyphen | Abbreviation mark | Fullstop/ period |
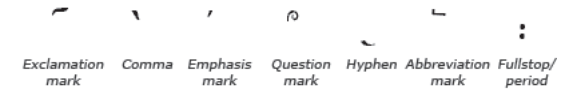
Erkatagir Script

The Erkatagir script is monumental in style. The majuscule letters are large, erect, with gracefully rounded lines that connect (or spring from) the vertical elements of the letters. All letters are written on a base line between two imaginary parallel lines, with ascending and descending elements only slightly extending beyond. Round Erkatagir is characterized by a contrast of thick vertical forms and razor-thin connecting curved strokes.
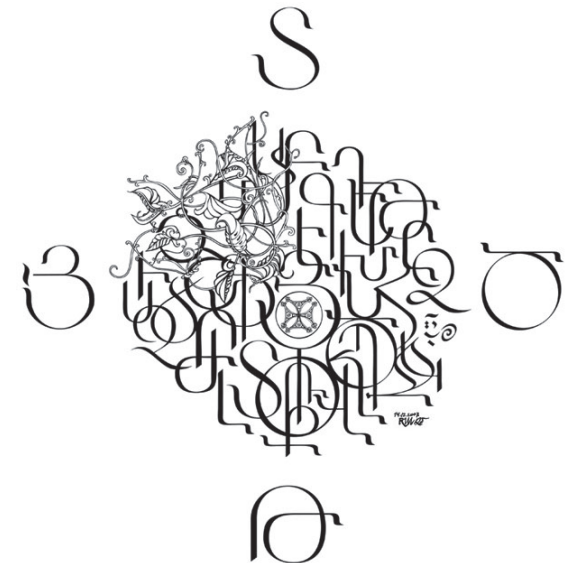
Bolorgir Script
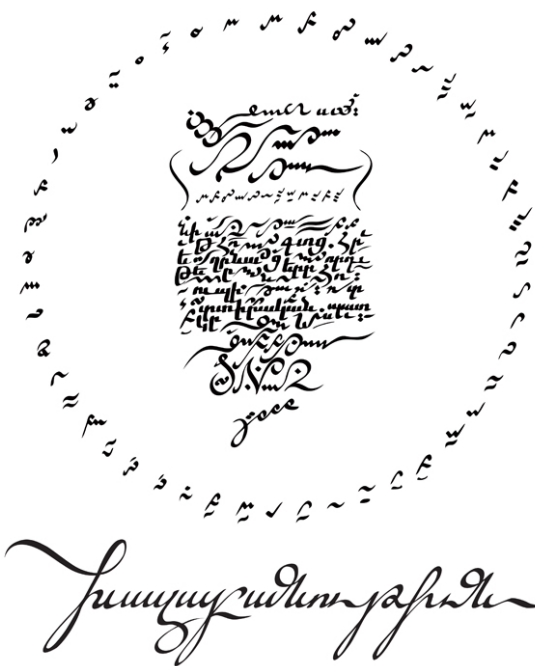
The Bolorgir, or minuscule, ancestor of modern Armenian type fonts, dominated scribal hands from the 13th to 16th centuries and continued well through the 19th. It has developed more elegant and graphic forms, and although by definition a round script, the characters are slanted and the letters have sharp corners. The contrast between base shapes and connecting strokes is not as extreme as in Erkatagir; it is a more cursive script (characters are closer to one another), smaller in size and different in shape.

Notrgir Script

The Notrgir, or notary script, is a blend of Bolorgir and Sła'gir, dominated by small cursive forms. Back in the 17th and 18th centuries, the secretary—working as a scribe in the royal court or Catholicosate—employed as a matter of necessity time-saving cursive versions of Bolorgir and even smaller Notrgir letters. The structure may have
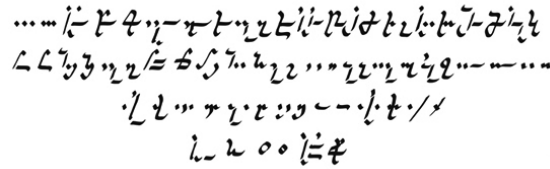
entered Armenian writing traditions in the late Byzantine Greek or Latin periods.

Sła'gir Script
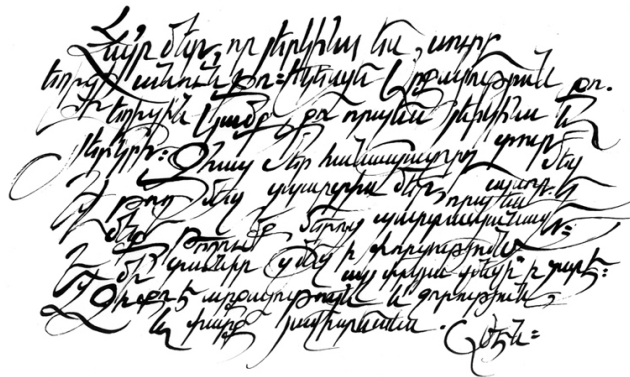
reed pens, its main characteristic was that it possessed an equal width of all elements. In general, the shape of the letters recalls that of an irregular Bolor'gir, although some elements of Straight Erkata'gir are in evidence as well. This became the basis for contemporary hand-written scripts in Armenia.

Armenian Writing Materials

Calligraphy was a well-established practice in medieval Armenia, with a calligrapher typically in possession of a wide assembly of tools. Early writing tools were made of metal, which were later replaced by reed pens – "kalam". Quill pens were used as well. The perfected tool became the pen-and-ink bottle, which made the action of dipping the pen in ink obsolete.

Many early Armenian manuscripts employed brown ink containing an iron oxide rather than the dark black of an Indian or Chinese ink. The inks were tested on marble plates and were prepared in containers made from clams. There were virtually hundreds of recipes for ink, prepared chemically or from natural pigments and minerals. Apart from basic components such as clay and metal, egg yolk and honey, other natural elements were used. Water was used to mix the ink and by the end of the process, gold, silver or wax polish was often applied to the surface. Black and red colors were most frequently in use, along with some usage of brown, green and blue, which were famous for their quality across Europe and the East. Arab writers and calligraphers often used and praised Armenian colors, especially "vordan karmir - known in Europe as "Porphyrophora hamelii" or "Armenian red", and in the Arab world as "kirmiz" - a deep crimson dye (RGB 220, 20, 60) extracted from an insect (Pseudococcus) common to the Ararat Valley.

Georgian

Georgian is the writing system of the Georgian language (of course), but also of other languages in the Caucasus, mostly South Caucasian languages. Georgian has always used three distinct alphabets: Asomtavruli, Nuskhuri and Mkhedruli. They have progressed through three forms, all dissimilar, even though they share the same letter names and "collation" (now you know that's just a fancy way of saying alphabet order). The word meaning "alphabet" (anbani) is derived from the names of the first two letters of each of the three Georgian alphabets, the modern one containing 33 letters.

ა	ani	[a]	მ	mani	[m]	ღ	ghani	[ɣ]
ბ	bani	[b]	ნ	nari	[n]	ყ	q'ari	[q?]
გ	gani	[g]	ო	oni	[o]	შ	shini	[š]
დ	doni	[d]	პ	p'ari	[p?]	ჩ	chini	[č]
ე	eni	[e]	ჟ	zhani	[ž]	ც	tsani	[ts]
ვ	vini	[v]	რ	rae	[r]	ძ	dzili	[dz]
ზ	zeni	[z]	ს	sani	[s]	წ	ts'ili	[ts?]
თ	tani	[t]	ტ	t'ani	[t?]	ჭ	ch'ari	[č?]
ი	ini	[i]	უ	uni	[u]	ხ	xani	[x]
კ	k'ani	[k?]	ფ	pari	[p]	ჯ	jani	[ʃ]
ლ	lazi	[l]	ქ	kani	[k]	ჰ	hae	[h]

Georgian is interesting because of its double influence. Like its neighboring language, Armenian, it displays Greek influences in its letter-ordering, while Iranian influences are visible in the cursive shapes of the letters (especially the ancient forms), and the abundance of sibilants are reminiscent of Pahlavi, an ancient Iranian script.

Mongolian

The Mongolian script has a long history. It was developed as an adaptation of the script of the Uyghurs, who were captured by the Mongols during a war against the Naimans around the 12th century CE. But it didn't fit the Mongolian language: the spelling was ambiguous because Uyghur letters represented multiple sounds. In addition, the spelling fossilized while the sounds naturally evolved, thus separating the written and spoken language. Language reform during the 16th century CE alleviated the problem, and the resulting script is known as Mongolian:

Vowels		Consonants								Numerals	
а	a		Н	n		Ш	sh		Х	h		0
э	e			ng		Т	t		К	k		1
и	i		б	b		Д	d		Ц	ts		2
о	o		П	p		Ч	ch		з	dz		3
у	u		Х	h		Ж	dzh		Х	h		4
ө	ou		Г	g		Й	y		Ж	zr		5
Y	oo		М	m		Р	r			lh		6
	ee		Л	l		В	v			zh		7
			С	s		Ф	f			ch		8
												9

Vertical Script

Mongolian is special for its vertical writing. The Uyghur script and its descendants (Mongolian, Oirat Clear, Manchu and Buryat) are the only vertical scripts written from left to right. This happened because the Uyghurs rotated their script (which was derived from Sogdian, a right-to-left script) 90° counter-clockwise to emulate Chinese writing, but without changing the relative orientation of the letters.
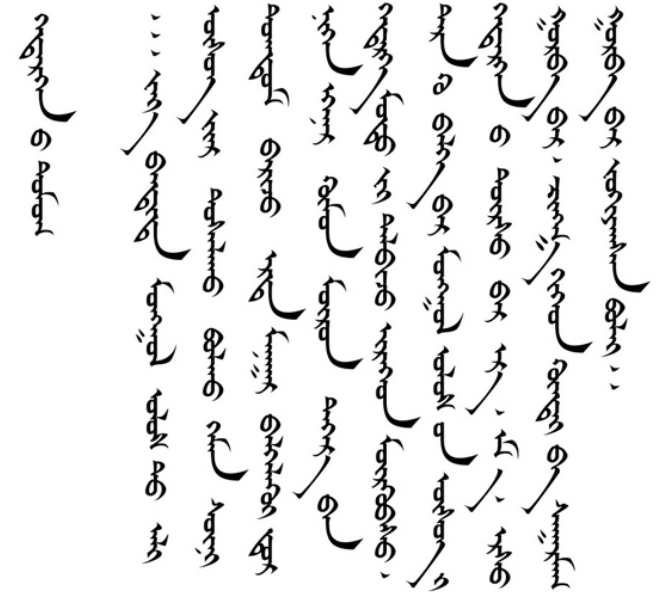
It is a beautiful and alien looking script that seems at home next to ogham (Druidic) writing and Chinese as well.

Germanic Runes

The runes are the written letters that were used by the Norse and other Germanic peoples before the adoption of the Latin alphabet in the later Middle Ages. Unlike the Latin alphabet, which is an essentially utilitarian script, the runes are symbols of some of the most powerful forces in the cosmos. In fact, the word "rune" and its cognates across past and present Germanic languages mean both "letter" and "secret/mystery." The letters called "runes" allow one to access, interact with, and influence the world-shaping forces they symbolize. Thus, when Odin sought the runes, he wasn't merely attempting to acquire a set of arbitrary representations of human vocal sounds. Rather, he was uncovering an extraordinarily potent system of magic.

Writing in runic symbols is somewhat unique because there is no standard direction. The can be written any way: up, down, left or right. The symbols can even be turned upside down to convey different meanings. They were usually reserved for important occasions or events. Most Runic texts are found on hard surfaces such as rock, wood, and metal, and this might explain its angular shape. Because of the resemblance to Mediterranean scripts, it is very likely that Futhark was adapted from either the Greek or Etruscan alphabet. Even though the earliest Runic inscriptions are from the 3rd century CE, its origin may lie much deeper in the pre-history of Northern Europe.

The Runic alphabet is also known as Futhark, a name composed from the first six letters of the alphabet, namely f, u, th, a, r, and k. In this way, "Futhark" is analogous to the word "alphabet", which is from alpha and beta, the first two letters of the Greek alphabet. And why were the letters ordered in such a way. Nobody knows the answer, but it might been some form of mneumonic function that was not preserved.

The first Runic inscriptions that have survived to the modern day dated from around 200 CE. The alphabet consists of 24 letters, 18 consonants and 6 vowels.
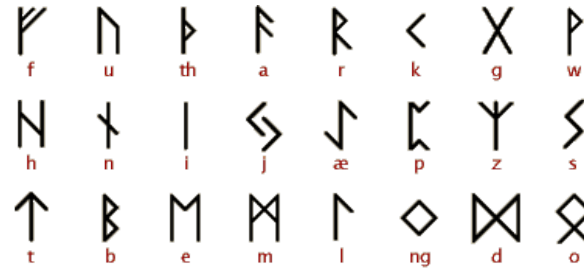
Traditionally, the 24 letters are divided into three groups of eight letters called ættir. In the previous chart, each row is an ætt (the singular of ættir). This means that f, u, th, a, r, k, g, and w belong to the first ætt; h, n, i, j, æ, p, z, and s belong to the second; and t, b, e, m, l, ng, d, and o belong to the third. Also, a rune has a position within each ætt, so for example, k would be the 6th rune in the 1st ætt, and t would be the 1st rune in the 3rd ætt.

What is interesting about these two numbers associated with every rune is that they can be used to write an "encoded", version of the rune. An encoded rune consists of a central vertical line, with short horizontal lines left of the vertical line determined by the rune's ætt number, and short horizontal lines on the right side determined by the rune's position within its ætt, as shown below:

Some scholars have theorized that this alternate system of representing letters with vertical and horizontal lines has some kind of connection to Ogham, but no solid links have been found yet.

Writing Runes

The Armanen consists of some 18 intersections, all of which can be extracted from the six line hexagon surrounding a central triple cross. This is a system of runes based on the younger or earliest Futhark system.

The hexagonal star is not merely functional. It serves as the basis for drawing the runes in a consistent format. It can also be thought of as a three dimensional cube.
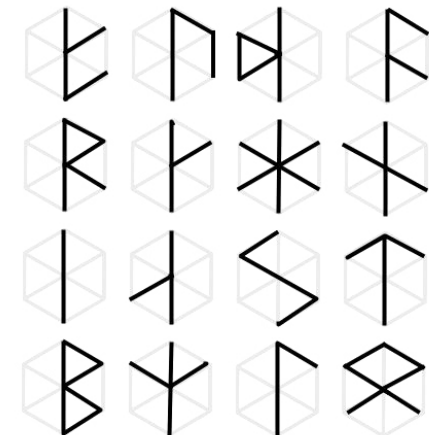
Ogham

The Ogham script recorded the earliest Old Irish texts dating between the 3rd and the 6th century CE. Ogham inscriptions are found exclusively in Ireland, Scotland, and Wales. Mostly they are genealogical inscriptions in the form of "X son of Y" on corners of large stone slabs. After the 6th century CE, Old Irish was written with the Roman alphabet, and Ogham disappeared from general but the knowledge must have been preserved in some form because our knowledge of Ogham comes from the chapter Auraicept na n-Éces in the 15th-century work The Book of Ballymote (Leabhar Bhaile an Mhóta), which also contains geneologies, mythologies, and histories of Ireland. Various opinions exist on the exact origin of ogham. Some claim that it stemmed from a cryptic way of writing runes, some say that it was inspired from the Roman alphabet, and yet others hold that it was independently invented.
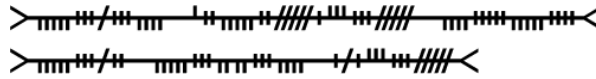
Ogham can be written vertically or horizontally with the line connecting the sentence or thought. It can also be written over objects as seen in this illustration below. One of the interesting features of this writing style is that each letter corresponds to a sound, a number, a tree and a runic concept at the same time.

Vertical Ogham

alcme b (first alcme)				alcme h (second alcme)			
	beith [*betwias] - birch	b	[b]		uath - hawthorn	h	[y]
	luis - rowan	l	[l]		dair [*daris] - oak	d	[d]
	fern [*wernā] - alder	f	[w]		tinne - holly	t	[t]
	sail [*salis] - willow	s	[s]		coll [*coslas] - hazel	c	[k]
	nion - ash	n	[n]		ceirt [*kʷertā] - apple	q	[kʷ]
alcme m (third alcme)				**alcme a (forth alcme)**			
	muin - vine	m	[m]		ailm - white fir	a	[a]
	gort [*gortas] - ivy	g	[g]		onn [*osen] - gorse	o	[o]
	ngéadal [*gʷēddlan] - reed	ng	[gʷ]		úr - heather	u	[u]
	straif - blackthorn	z	[sw] [ts]		eadhadh - poplar	e	[e]
	ruis - elder	r	[r]		iodhadh - yew	i	[i]
fifth alcme				**Other symbols**			
	éabhadh	ea			peith - soft birch	p	
	ór - gold	oi			eite (feather) marks start of texts		
	uilleann - elbow	ui			spás - space		
	ifín - pine	ia			eite thuathail (reversed feather) marks end of texts		
	eamhancholl	ae					

The Americas

The Americas were isolated from European, Chinese and Vedic traditions. They developed independantly and many Americade cultures never developed true writing systems.

Inuktitut (Eskimo)

Inuktitut is the language of the Inuit people, specifically the Inuit of the Canadian Eastern Arctic. It also refers to the Inuit language as a whole, which itself is more of a dialect continuum than a single language. The Canadian census reports that approximately 35,000 Inuktitut speakers are in Canada, including about 200 who reside outside of traditionally Inuit lands.

Because the Inuit language is spread over such a large area, divided between different nations and political units and originally reached by Europeans of different origins at different times, there is no uniform way of writing the Inuit language.

Inuit throughout the North had no traditional writing systems and made no attempts to develop writing until the missionaries arrived in different regions, bringing with them various writing systems and rules. An exception was the Alaskan Inuit, who attempted to develop their own picture-writing systems in the early 1900s. Currently there are six "standard" ways to write the language.

Cree

Cree (Nehiyawewin) IS a group of closely related Algonquian languages spoken by about 60,000 people in Canada, especially in Ontario, Manitoba, Saskatchewan and Alberta.

Modified versions of this syllabary are used to write: Blackfoot, Ojibwe, Carrier, Slavey, Naskapi and Inuktitut.

Each sign can be written facing four different directions which indicate the vowel attached to it. As there are up to 7 vowels in some dialects of Cree, diacritics are used to indicate the extra vowels. It is written from left to right and the finals are used to write stand-alone consonants.

There are various different versions of the Cree syllabary, which are used to write different dialects of the Cree language. The written language was invented by Wesleyan missionary James Evans.

Thanks to its simplicity and the ease with

ᒧᕐᐧᐁ ᐃᓂᓂ ᐱᑕᐃᒐᑊᕉᐦᐃᐧᐋᐧ ᐧᐅ ᓂᐨᐋᔦ' ᑊᐅᓂᐊᒐᑊᕉᐦᐃᐧᐋᐧ ᐦᐧᑕ ᒑᐧᐁᐅᐦᐃᐧᐁᐧᐊᕁ ᐧ ᐸᑭᑎ ᒐᐧᐅᕁᐸᐧᐅᓂᐧᐅ ᐦᐧᑕ ᐧᐃᕁᐧᐦᐧᐅᑕᐧᐃᐧᐊᕁ ᐱᕆ ᐃᔕ ᑭ

which it could be learnt, the Cree syllabary was hugely successful with the Cree people. Within a short space of time, virtually the whole community was literate in the syllabary and James Evans became known as "the man who made birchbark talk."

Cherokee

The Cherokee call their language Tsalagi or Tslagi. They refer to themselves as Aniyunwiya, which means "Principal People". The Iroquois based in New York have historically called the Cherokee Oyata'ge'ronoñ, which means "inhabitants of the cave country".

Many theories – though none proven – abound about the origin of the name "Cherokee". It may have originally been derived from the Choctaw word Cha-la-kee, which means "those who live in the mountains", or Choctaw Chi-luk-ik-bi, meaning "those who live in the cave country".

Before the development of the Cherokee syllabary in the 1820s, Cherokee was a spoken language only. The Cherokee syllabary is a syllabary invented by Sequoyah to write the Cherokee language in the late 1810s and early 1820s. His creation of the syllabary is particularly noteworthy in that he could not previously read any script. He first experimented with logograms, but his system later developed into a syllabary. In his system, each symbol represents a syllable rather than a single phoneme; the 85 characters (originally 86 characters) in the Cherokee syllabary provide a suitable method to write Cherokee. Some symbols do resemble the Latin, Greek and even the Cyrillic scripts' letters, but the sounds are completely different (for example, the sound /a/ is written with a

letter that resembles Latin D).

After he finalized the syllabary, he taught it to his daughter, and she became the key to the adoption of the written language.

CHEROKEE PRINTED CHARACTERS:

D	a	R	e	T	i	Ꮼ	o	O˞	u	i	v
S	ga	Ꮹ	ka	Ꮃ	ge	Ꮽ	gi	A	go	J	gu	E	gv
Ꭾ	ha	P	he	Ꭾ	hi	Ꮁ	ho	Ꮁ	hu	Ꮱ	hv
W	la	Ꮥ	le	Ꮅ	li	G	lo	M	lu	Ꮂ	lv
Ꮇ	ma	OI	me	H	mi	Ꮊ	mo	�воль	mu		
Ꮎ	na	Ꮏ	hna	G	nah	Ꮑ	ne	Ꮒ	ni	Z	no	Ꮓ	nu	O˞	nv
Ꮖ	qua	Ꮙ	que	Ꮗ	qui	Ꮴ	quo	Ꮙ	quu	Ꮛ	quv
Ꮝ	sa	Ꮪ	s	Ꮢ	se	Ꮟ	si	Ꮶ	so	Ꮬ	su	R	sv
Ꮮ	da	Ꮤ	ta	S	de	Ꮦ	te	Ꮥ	di	Ꮴ	ti	V	do	S	du	Ꮨ	dv
Ꮪ	dla	Ꮯ	tla	L	tle	C	tli	Ꮰ	tlo	Ꮹ	tlu	P	tlv
G	tsa	V	tse	Ꮲ	tsi	K	tso	Ꮷ	tsu	Ꮳ	tsv
Ꮐ	wa	Ꮿ	we	Ꮎ	wi	Ꮹ	wo	Ꮽ	wu	6	wv
Ꮛ	ya	B	ye	Ꮵ	yi	Ꮦ	yo	G	yu	B	yv

CHEROKEE HAND WRITTEN CHARACTERS:

When Sequoyah returned east, he brought a sealed envelope containing a written speech from one of the Arkansas Cherokee leaders. By reading this speech, he convinced the eastern Cherokee also to learn the system, after which it spread rapidly. In 1825 the Cherokee Nation officially adopted the writing system. Books, religious texts, almanacs and newspapers were all published using the syllabary, which was widely used for over 100 years.

Mayan Hieroglyphics

A system of writing used by the Maya people of Mesoamerica until about the end of the 17th century, 200 years after the Spanish conquest of Mexico. It began to be used around 250 B.C. It was the only true writing system developed in the pre-Columbian Americas. Mayan inscriptions are found on stelae (standing stone slabs), stone lintels, sculpture, and pottery, as well as on the few surviving Mayan books, or codices. The Mayan system of writing contains more than 800 characters, including some that are hieroglyphic and other phonetic signs representing syllables. The hieroglyphic signs are pictorial—i.e., they are recognizable pictures of real objects—representing animals, people, and objects of daily life.

The Mayan writing system is complex: a single sign may function as a logogram and also have one or more syllabic values; similarly, a single logographic sign may be used to represent several words that are pronounced in the same way. In addition, different signs may share phonetic or logographic values. In some cases scholars understand the meaning of a logographic sign but have not determined its reading—i.e., what word it stands for; other signs can be deciphered phonetically, but their meanings are not known. Nevertheless, by the early 21st century scholars had read a substantial number of inscriptions, affording much new information about Mayan language, history, social and political organization, and ritual life, as well as a completely different picture of Mayan civilization than had been previously proposed.

MAYAN NUMERALS:

EXAMPLES OF MAYAN CHARACTERS:
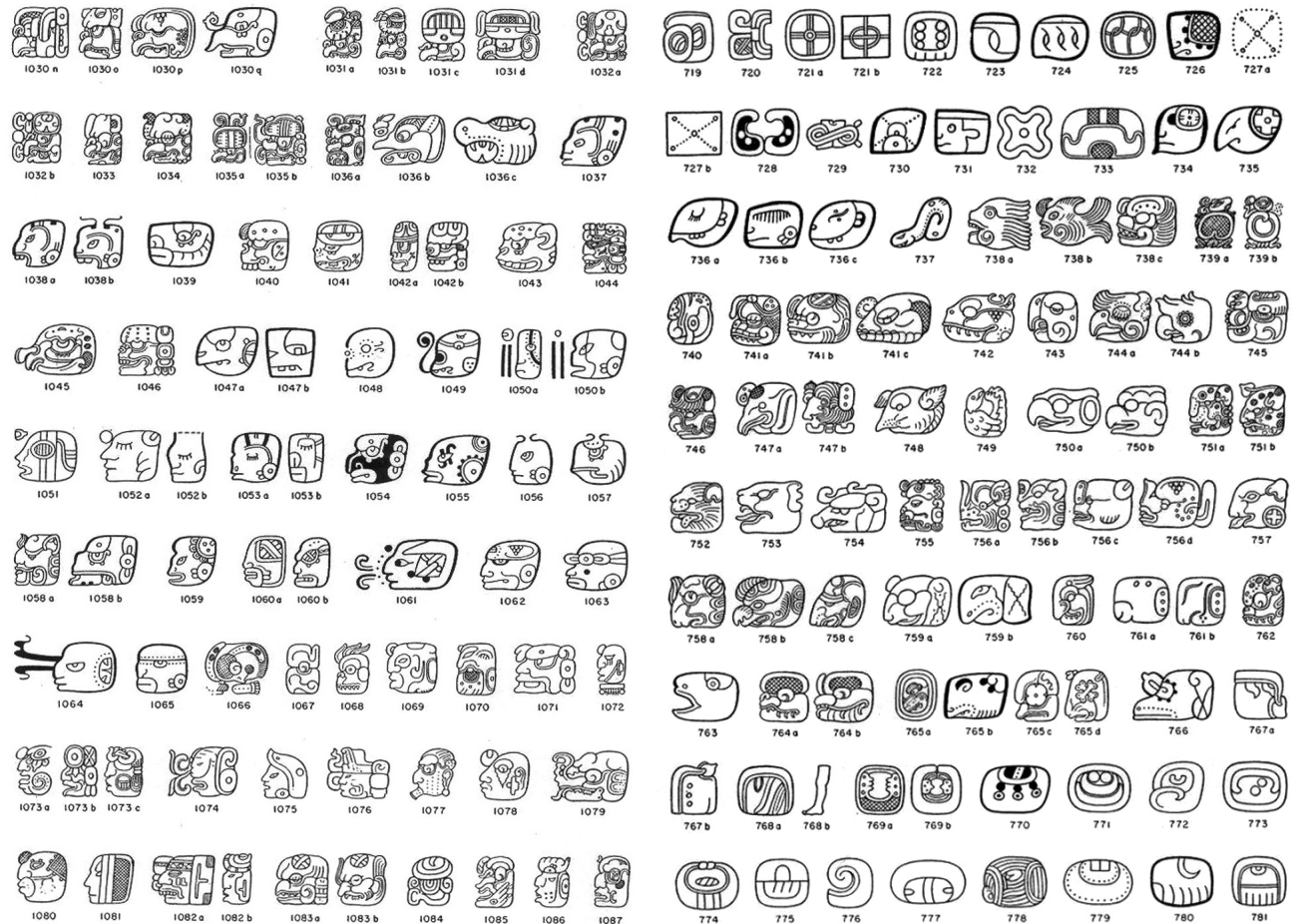
Aztec Codecies

When the Aztecs arrived in the Valley of Mexico, there were already forms of Mesoamerican writing in the area, which they adopted along with other elements of the culture. The Aztec form of writing entailed making pictures as symbols or glyphs, which represented a word or idea. Most of their glyphs were actually illustrations of the word they meant to convey. For example, the glyph for war was a picture Painting depicting Aztec scribes at work. Gianni Dagli Orti/Corbis. of a war club and shield. The glyph for tree was the picture of a tree. The Aztecs had some glyphs representing sounds or syllables, and these could be put together to form the name of a place. They also had a few glyphs that were not illustrations, but stood for ideas or words. The Aztec writing system never reproduced the full spoken language like that of the Maya.

The Aztecs generally did their writing in books called codices (plural of codex). Inside a codex was a very long sheet of paper that had been folded in an accordion-like fashion. The paper was usually made from the bark of fig trees, which was treated with lime and then pounded into a pulp. The pulp was then flattened into thin sheets of paper. Huge quantities of paper were often required as tribute payments from conquered lands in the empire. Strips of paper, sometimes 30 feet (9 meters) long, were glued to wooden book covers. The pages of the codex were marked off by lines and then folded like a fan. The writing and pictures covering both sides of each page were read from the top to the bottom.

Most reading and writing in Tenochtitlán and other cities was done by professional scribes (people whose function was to write the language) who were highly skilled in drawing and interpreting the glyphs. When they used glyphs to write on a page, the scribes did not arrange them in the order the reader would read them, but in patterns that would have significance only to a professional reader.
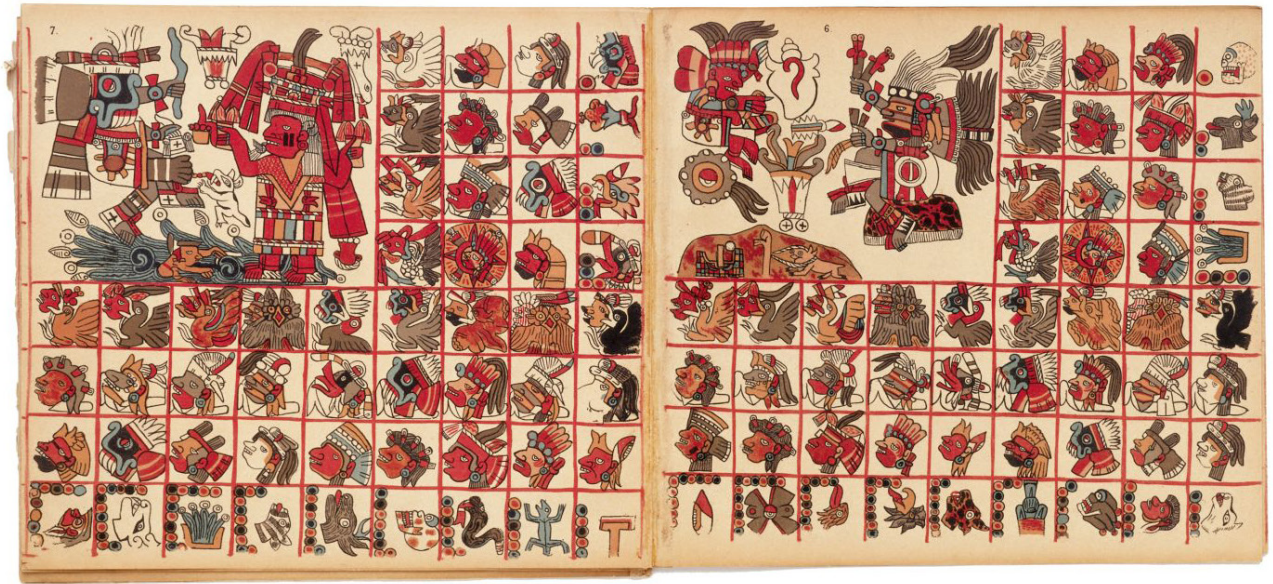
Example of an Aztec Codec

For keeping records and recording the movements of the stars, this writing system functioned fairly well. For telling the history or stories of the empire, however, the system relied on the memory of the person telling the story. The person reading the page would already have committed its contents to memory, but he was able to use the glyphs and pictures to jog his memory as he related the page's meaning.

The Aztec rulers relied heavily on their writing system to manage their empire. The system was extremely useful as a means to record numbers, dates, places, names of people, and many other concepts. The Aztec priests relied heavily on books in their observations of the stars and calendar systems. Each temple had a full library of codices with astronomical observations and notes about the movements of the planets and stars.

All knowledge of Nahuatl literature relied on the memories of the Aztec people after the Spanish conquest.

Inca Quipu

We still don't know how to de-code khipu or quipu, string-based information storage systems developed by the Inca, but they remain fascinating nonetheless.

Talking Knots 'Talking Knots' is the nickname for a truly unique way to 'write down' information: knots tied into strings. Used by the Inca, this is the only known writing system of pre-Columbian America, and dates back at least 4,600 years. 'Talking knots' were widely used for taxation, census taking, historical information, astronomy, and possibly even maps.

Most archeologists think that the knotting system contains both numbers and words, but only the numbers have ever been deciphered by modern scholars. The color, position and spacing of the knots might also contribute to their meaning. We don't know, because talking knots were suppressed by Spanish conquerors in the sixteenth century in an effort to prevent communication of secret messages.

Less than eight hundred quipu, or collections of these knotted strings, survive today. They're often found inside graves, and archeologists have theorized that they might tell the story of the dead person they were interred with.

African Continent

It is interesting that Africa holds the oldest population of the human race, We originated there and moved to inhabit the rest of the globe. It is suspected that the oldest writing systems originated here. There is strong evidence that in the Nile Valley some of the first writing began as heiroglyphic in nature. Egypt shares it "oldest recorded culture" with the Vedic kingdoms in India.

Tifinagh

Tifinagh is a northern African alphabet that was derived directly from the Phonecians and is still in use by Berbers, an indigenous people who live mainly in Morocco and Algeria. Use of the alphabet waw illegal in Morocco for political reasons, but it was recently 'authorized' there as the official Berber script in 2003.

o	Θ	ⵚ	Ⓓ	ⵛ	◯	Ⓠ	ⵙ
a	b	e	h	u	r	ɼ	s

Ⓞ	Ⓒ	ⵆ	ⵅ	Λ	Ⴇ	ⵇ	ⵏ
ş	c	z	ẓ	d	ḍ	f	ḥ

Ⴤ	ⵝ	ⵥ	ⵉ	ⵀ	ⵛ	ⵎ	ⵏ
ɛ	x	q	i	j	l	m	n

✝	Ⴄ	ⵡ	ⵟ	ⵠ	ⵊ	ⵔ	ⵕ
t	ṭ	w	y	g	gʷ	k	kʷ

Since September 2003, the Tifinagh alphabet children in Moroccan primary schools have been taught to write Tamazight with the Tifinagh alphabet. It is also used by the Tuareg, particularly the women, for private notes, love letters and in decoration. For public purposes, the Arabic alphabet is normally used.

Tamazight, a family of Berber languages spoken by between 16 and 30 million people mainly in Morocco and Algeria, and also in Libya, Mali, Niger, Tunisia, Burkina Faso, Egypt and Mauritania.

Tifinagh Sample Writing:

Amharic is the national language of Ethiopia. It is the second most-spoken Semitic language in the world, after Arabic. It is estimated that Amharic is spoken by over 60 million people inside Ethiopia and a number of other countries, particularly in Eritrea, Djibouti, Somalia, Egypt, Israel, and United States. Amharic is written using Amharic alphabet named fidel that grew out of the Ge'ez writing system.

The Amharic script is an abugida, and the graphs of the Amharic writing system are called fidel. Each character represents a consonant+vowel sequence, but the basic shape of each character is determined by the consonant, which is modified for the vowel. Some consonant phonemes are written by more than one series of characters: /?/, /s/, /s'/, and /h/ (the last one has four distinct letter forms). This is because these fidel originally represented distinct sounds, but phonological changes merged them. It is written left to right in horizontal lines.

There is no agreed way of transliterating Amharic into Roman characters. The Amharic examples in the sections below use one system that is common, though not universal, among linguists specializing in Ethiopian Semitic languages.

Numerals

These numerals developed from the Greek alphabet, possibly via Coptic.

፩	፪	፫	፬	፭	፮	፯	፰	፱	፲
አንዶ	ሁለት	ሶስት	አራት	አምስት	ስዶስት	ስባት	ስምንት	ዘጠኝ	አስር
and	hulätt	sost	aratt	amməst	səddəst	säbatt	səmmənt	zätäññ	assər
1	2	3	4	5	6	7	8	9	10

፳	፴	፵	፶	፷	፸	፹	፺	፻	፼
ሀያ	ሰሳሳ	አርባ	ሀምሳ	ስልሳ	ሰባ	ሰማንያ	ዘጠና	መቶ	ሺ
haya	sälasa	arba	hamsa	sälsa	säba	sämaña	zätena	mäto	ši
20	30	40	50	60	70	80	90	100	1000

Sample Text:

ያምናሉ፡፡ ክርስቲያናችም እግዚአብሔር እንዴት እንደሚወዳቸው እና በእነሱም ምን ያህል ደስ እንደሚሰኝ ሴሪ�も በተለየ ሁኔታ መሆኗ ይደምሩሉ፡፡ በተልዕሱ መፍርንም ደለመመዳሉ፡፡ በዚህ ስፍራ ያለን ወንኛ ዓላማ የእግዚአብሔርን ተልዕስ በጥልቀት ማብራራት እይደለም፡፡ እኛ የምንልገው በዚያ ተልዕስ ውስጥ ዘሳ እና በይበታ የተሞላ ተሳትፎ እንድታደርጉ ለማስታጠቅ ነው፡፡ የመጀመሪያዎቹ አራት ምዕራፎች ከእግዚአብሔር ዓላም አፈፋየ የደጀነት ታሪክ ጀርባ ያለውን የተጋመደ ታሪክ እና ለክርስቲያናዊ ተልዕስ ያለውን ፋይዶ ይመረምሩሉ፡፡ በሰኬ ስሚዝ ፡ ሪ◌ ፌሊፕስ፡ ጀፍስ ኮዘክስ እና ጀን ፓይፐር የተፃፉት ምዕራፎች ልጀነት በክርስቲያናዊ ተልዕስ ውስጥ ያለው ፋይዶ ላይ ያተኩሩሉ፡፡

በተልዕስ መኖር ማለት ወንጌል በዚህ በወደዛ ዓለም ውስጥ እየኖዳኑ የሀይወታችን ክፍል ለእግዚአብሔር ፀ.ን ክበር እንደለውም በወንጌል መርህ መሰረት እየኖዳኑ ቅጻ◌ት መኖር ማለት ነው፡፡ ይህ መቼሐፉ ያከዘውንልሳል ብለን ተስፋ የምናደርገው ነገር በመጀመ ቅሬሳዊው የልጀነት አሥተምህር በወንጌል የምዕራ◌ ውስጥ እንድታኖ ትጥዬ እንዲሀኖችዉ ማስቻል ነው፡፡

በምዕራ◌ብ እንደምንንኝ አማኞች በዐሀላዊ ተጽዕና የተነሳ ክርስትና እኢሽቀለቀሉ መመጣጠን ተመልከተነሳል ፡ ኢ አማኒ የሆነ አመለከከት ሲስፋፋ አይተነሳል፡ ዓለም አፈፋዊ ፖለቲካዊ አለመረጋጋት ፡ በተቸማሪም በውስጣችን ከኃበአት ጋር በውስጣችን የምናፈርገው ፍልሚያ ሲደማማፉ ሰማይ ሲደፈብን ነው ልጀነ እንችላሉ፡ ስፋ አድርገን እግዚአብሔር ለሰራ ክበር እና ለዕፅ ጥቅም ያደረገውን እያደረገ ያለውን እና ወደፊት የሚያደርገውን ከማየት ይልቅ ራሳችንን እና ዓለምን በጠባ ተመልከተነ ምን ነካቸው ልጀ እንችላሉ፡ ጥባ አመለከከት ክርስቲያናዊ ተልዕን ያቆማል፡ ስፋ ያለ አመለከከት ደግሞም ያሳድግዐል የበረ◌ዋል፡፡

ራሳችንን እና ዓለማችንን በተገቢው መኖር መመልከታችን ለክርስቲያናዊ ተልዕስ በማም አስፈሳጊ ነው፡ እኒም የያሳው አጠቃሳይ የመጽግፍትን ታሪክ ለመመልከት ልጀነት ትክክለኛው መነጸር ነው ፡፡

እግዚአብሔርን ለእኛ ያለው ፍቅር ግሳፀ ነው ብሱ እንደማስብ ለክርስቲያናዊ ሀይወታችን እንትኩተ የሆነ አስተሳሰበ የለም፡ ለጥቂቱ ደቀታዎች ወደ ጠፋት ልጀ◌ ታሪክ እንመለስ በ ፬ልደረገ አፍ ዘ ሊ◌ዳ◌ነገ ጋረ ሲጓኬሪ ፈርኦስን ቤቱን ስለሀፉው ልጀ ታሪክ አንድ ፍንንፀ ይሰጠናል፡ ወድ አባቱ እየተመለስ በነበረበት ጊዜ ፡ ልጀ መሆን አይገባቸም ብሱ ሲነግረው ያቅዳል፡ በእንግግሙ ይህ ነገር እውነት ነበር፡፡ በዚህም እርገጠኛ ሆኖ አባቱን በመተዉ እና

Punctuation

፣	፨	፥	፦	፡-	፧
comma	full stop / period	colon	semi-colon	preface colon	question mark
					(no longer used)

Abugida Keys

Also used to write: Argobba, Awngi, Blin, Chaha, Dizin, Harari, Inor, Silt'e, Tigre, Tigrinya and Xamtanga

ቈ	ቊ	ቌ	ቈ	ጐ	ኈ	ጌ	ጐ	ኰ	ኈ	ኬ	ኰ	ጕ
k'ʷi	k'ʷa	k'ʷe	k'ʷe	hʷi	hʷa	hʷe	hʷɛ	kʷi	kʷa	kʷe	kʷɛ	gʷi

ጓ	ጔ	ጕ	ⷈ	ቧ	ዟ	ጧ	ሟ	ቷ	ዧ	ጯ	ሯ	⷗
gʷa	gʷe	lʷa	lʷa	bʷa	zʷa	t'ʷa	mʷa	tʷa	ʒʷa	tʃ'ʷa	rʷa	tʃʷa

ⷘ	ጿ	ሷ	ⷕ	ዷ	ⷙ	ⷚ	ⷛ	ⷜ	ⷝ	ⷞ	⷟
dʒʷa	ts'ʷa	sʷa	nʷa	dʷa	fʷa	ʃʷa	ɲʷa	rʲa	mʲa	fʲa	ʔe

	a/ä	u	i	a	e	ə	o		a/ä	u	i	a	e	(ə)	o
	[a/æ]	[u]	[i]	[a]	[e]	[ɨ]	[o/ɔ]		[a/æ]	[u]	[i]	[a]	[e/ɛ]	[ɨ/ʉ]	[o/ɔ]
h [h]	ሀ hä	ሁ hu	ሂ hi	ሃ ha	ሄ he	ህ h(i)	ሆ ho	h/k [h]	ኸ hä	ኹ hu	ኺ hi	ኻ ha	ኼ he	ኽ h(i)	ኾ ho
l [l]	ለ lä	ሉ lu	ሊ li	ላ la	ሌ le	ል l(i)	ሎ lo	w [w]	ወ wä	ዉ wu	ዊ wi	ዋ wa	ዌ we	ው w(ʉ)	ዎ wo
h/h [h]	ሐ hä	ሑ hu	ሒ hi	ሓ ha	ሔ he	ሕ h(i)	ሖ ho	ʕ/ʔ [ʔ]	ዐ ʔa	ዑ ʔu	ዒ ʔi	ዓ ʔa	ዔ ʔe	ዕ ʔi	ዖ ʔo
m [m]	መ me	ሙ mu	ሚ mi	ማ ma	ሜ me	ም m(i)	ሞ mo	z [z]	ዘ ze	ዙ zu	ዚ zi	ዛ za	ዜ ze	ዝ z(i)	ዞ zo
s/ś [s]	ሠ sä	ሡ su	ሢ si	ሣ sa	ሤ se	ሥ s(i)	ሦ so	zh/ž [ʒ]	ዠ ʒe	ዡ ʒu	ዢ ʒi	ዣ ʒa	ዤ ʒe	ዥ ʒ(i)	ዦ ʒo
r [r]	ረ re	ሩ ru	ሪ ri	ራ ra	ሬ re	ር r(i)	ሮ ro	y [j]	የ je	ዩ ju	ዪ ji	ያ ja	ዬ je	ይ j(i)	ዮ jo
s [s]	ሰ se	ሱ su	ሲ si	ሳ sa	ሴ se	ስ s(i)	ሶ so	d [d]	ደ de	ዱ du	ዲ di	ዳ da	ዴ de	ድ d(i)	ዶ do
sh/š [ʃ]	ሸ ʃe	ሹ ʃu	ሺ ʃi	ሻ ʃa	ሼ ʃe	ሽ ʃ(i)	ሾ ʃo	j/ǧ [dʒ]	ጀ dʒe	ጁ dʒu	ጂ dʒi	ጃ dʒa	ጄ dʒe	ጅ dʒ(i)	ጆ dʒo
k'/q [k']	ቀ k'e	ቁ k'u	ቂ k'i	ቃ k'a	ቄ k'e	ቅ k'(i)	ቆ k'o	g [g]	ገ ge	ጉ gu	ጊ gi	ጋ ga	ጌ ge	ግ g(i)	ጎ go
qh [ʁ']	ቈ ʁ'e	ቊ ʁ'u	ቌ ʁ'i	ቋ ʁ'a	ቌ ʁ'e	ቍ ʁ'(i)	ቈ ʁ'o	t'/t [t']	ጠ t'e	ጡ t'u	ጢ t'i	ጣ t'a	ጤ t'e	ጥ t'(i)	ጦ t'o
b [b]	በ be	ቡ bu	ቢ bi	ባ ba	ቤ be	ብ b(i)	ቦ bo	ch'/č̣ [tʃ']	ጨ tʃ'e	ጩ tʃ'u	ጪ tʃ'i	ጫ tʃ'a	ጬ tʃ'e	ጭ tʃ'(i)	ጮ tʃ'o
t [t]	ተ te	ቱ tu	ቲ ti	ታ ta	ቴ te	ት t(i)	ቶ to	p'/p [p']	ጰ p'e	ጱ p'u	ጲ p'i	ጳ p'a	ጴ p'e	ጵ p'(i)	ጶ p'o
ch/č [tʃ]	ቸ tʃe	ቹ tʃu	ቺ tʃi	ቻ tʃa	ቼ tʃe	ች tʃ(i)	ቾ tʃo	ts'/ş [ts]	ጸ ts'e	ጹ ts'u	ጺ ts'i	ጻ ts'a	ጼ ts'e	ጽ ts'(i)	ጾ ts'o
h/h [h]	ኀ ha	ኁ hu	ኂ hi	ኃ ha	ኄ he	ኅ h(i)	ኆ ho	ts'/ş [ts]	ፀ ts'e	ፁ ts'u	ፂ ts'i	ፃ ts'a	ፄ ts'e	ፅ ts'(i)	ፆ ts'o
n [n]	ነ ne	ኑ nu	ኒ ni	ና na	ኔ ne	ን n(i)	ኖ no	f [f]	ፈ fe	ፉ fu	ፊ fi	ፋ fa	ፌ fe	ፍ f(i)	ፎ fo
ny/ñ [ɲ]	ኘ ɲe	ኙ ɲu	ኚ ɲi	ኛ ɲa	ኜ ɲe	ኝ ɲ(i)	ኞ ɲo	p [p]	ፐ pe	ፑ pu	ፒ pi	ፓ pa	ፔ pe	ፕ p(i)	ፖ po
ʔ/ʾ [ʔ]	አ ʔa	ኡ ʔu	ኢ ʔi	ኣ ʔa	ኤ ʔe	እ ʔi	ኦ ʔo	v [v]	ቨ ve	ቩ vu	ቪ vi	ቫ va	ቬ ve	ቭ v(i)	ቮ vo
k [k]	ከ ke	ኩ ku	ኪ ki	ካ ka	ኬ ke	ክ k(i)	ኮ ko								

Vai (Liberia)

The Vai syllabary is a syllabic writing system devised for the Vai language by Momolu Duwalu Bukele of Jondu, in what is now Grand Cape Mount County, Liberia. Vai, like Amharic, is written Left-Right.

From the 1830s until today it is used in Liberia, especially among Vai speakers. The syllabary proved popular with the Vai and by the end of the 19th century most of them were using it. In 1962 the Standardization Committee at the University of Liberia standardized the syllabary. A Vai version of the New Testament in the Vai script appeared in 2003.

Notable Features

Type of writing system: syllabary
Direction of writing: left to right in horizontal lines
Each symbol represents a consonant plus a vowel used to write.

Vai a member of Mande group of Niger-Congo languages spoken by about 104,000 people in Liberia, and by about 15,500 people in Sierra Leone.

	a [a]	ee [e]	e [ɛ]	i [i]	oo [o]	o [ɔ]	u [u]	nasal
vowels								
nasal vowels								
p [p]								
bh [b]								
b [ɓ]								
mb [ᵐɓ]								
kp [kp]								
mb [ᵐgb]								
gb [gb]								
f [f]								
v [v]								
t [t]								
dh [d]								
l [l]								
d [d]								
nd [ⁿd]								
s [s]								
z [z]								
ch [c]								
j [ɟ]								
nj [ᵐɟ]								
y [j]								ŋgā
k [k]								

	a [a]	ee [e]	e [ɛ]	i [i]	oo [o]	o [ɔ]	u [u]	nasal
vowels								
nasal vowels								
ng [ŋg]								
g [g]								
h [h]								
h⁻								
w [w]								
m [m]								wɔ̃
n [n]								
ny [nj]								
ŋ [ŋ]								

Vai Writing Example:

[Vai script text passage with verse numbers 10, 11, 12, 13]

A-ka-u-ku (Cameroon)

A-ka-u-ku is a script invented by King Ibrahim Njoya, the 17th king of the Bamum of West Cameroon, in 1896. It is classed in the Benue-Congo language group, the largest branch of the Niger-Congo language family.

It was made with the intention to preserve and transmit the history of his people, as back then the only method of transmission was oral. Ibrahim realised the inherent risk of miss-telling, accidental or deliberate, and thus during his reign ensured all levels of his government and educational institutions learned and taught this script. Named after its first 4 letters, A-ka-u-ku stands as relatively modern proof that Africa's illiteracy as untrue.

However, due to tensions between the French government and Ibrahim Njoya leading to his subsequent exile, it is no longer in general use and most Bamum have forgotten it. His grandson, current sultan of Cameroon Ibrahim Mbombo Njoya, has since transformed his palace into a school to re-teach the Bamum this script. The sultan initiated The Bamum Scripts and Archives Project in 2005 to bring it back from the brink of extinction.

Symbols and ideograms are used to depict syllables, making it a syllabary rather than an alphabet. When he first developed it, Ibrahim's officials helped him to simplify it because it had 465 characters! In its finalized form, though, it had a much more manageable 70 characters and 10 numerals. Just like the English alphabet it is read from left to right

A-ka-u-ku Single Characters

a	ka	u	ku	é	re	te	o	nyi	i	la	pa	ri	rié
lé	mé	ta	da	njem	m	su	mu	shi	si	shù	sù	ké	két
noue	nou	njoue	yo	shou	you	ya	sha	kú	pou	jé	té	pü	wi
pé	fé	rou	lou	mi	ni	rú	re	kén	kwen	ga	nga	cho	poue
fou	fem	wa	na	li	pi	lo	ke	mbèn	rèn	mèn	ma	ti	ki

Combinations

da	di	do	dé	tou	dou	tu	si	sé	sü	fou	vou	fo
f,v	vi	vé	fú	poue	bo	bou	po	re	ra	ro	rú
shi	ji	shé	shü	ke	ko	go	gué	gi	you	to	ja	jou

Numerals

0	1	2	3	4	5	6	7	8	9

Punctuation

full stop	colon	comma	semicolon	question mark

N'Ko

N'Ko is both a script devised by Solomana Kante in 1949 as a writing system for the Manding languages of West Africa, and the name of the literary language itself written in the script. The term N'Ko means I say in all Manding languages. The script has a few similarities to the Arabic script, notably its direction (right-to-left) and the connected letters. It obligatorily marks both tone and vowels.

The Characters

Vowels and consonants

da	ca	ja	ta	pa	ba	en	o	o	u	e	i	e	a
[d]	[tɕ]	[dʑ]	[t]	[p]	[b]	[n]	[ɔ]	[o]	[u]	[ɛ]	[i]	[e]	[a]
ya	wa	h	na	ña	ma	la	ka	fa	gba	sa	ɾa	ra
[j]	[w]	[h]	[n]	[ɲ]	[m]	[l]	[k]	[f]	[g͡b]	[s; ɕ]	[r]	[ɾ]

Extra letters for loanwords from European languages and Arabic

gh	yh	nh	mh	kh	[v]	[k͡p]	[g]
[ɣ]	[ɤ]	[ˀ]	[ʀ]	[ʃ]	[z]	bh	

Numerals

9	8	7	6	5	4	3	2	1	0

Punctuation

!	comma

Tone indication

nasalization	long rising tone	long low tone	long high tone	long falling tone	short rising tone	short low tone	short high tone

N'Ko Writing Example:

ᎢᏁᎢᎯ ᎯᏜᎯᎢᎯᏳᎢ ᏩᎢᎢᎯᏩᎢ ᏪᎢᏒ ᎢᏁᎢᎢ ᎯᎯᏒᎢᎣᏒᎢᏑᎯ ᎯᏪ ᏒᎢᏁᎢᎢ

Nsibidi

Nsibidi (also known as nsibiri, nchibiddi or nchibiddy) is a system of symbols indigenous to what is now southeastern Nigeria that is apparently ideographic, though there have been suggestions that it includes logographic elements. The symbols are at least several centuries old: Early forms appeared on excavated pottery as well as what are most likely ceramic stools and headrests from the Calabar region, dating between 400 and 1400 CE. Nsibidi's origin is generally attributed to the Ekoi people of southern Nigeria.
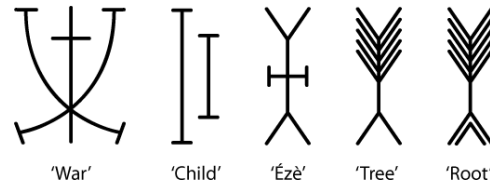
There are thousands of nsibidi symbols, of which over 500 have been recorded. They were once taught in a school to children. Many of the signs deal with love affairs; those that deal with warfare and the sacred are kept secret. Nsibidi is used on wall designs, calabashes, metals (such as bronze), leaves, swords, and tattoos.

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There are thousands of nsibidi symbols, of which over 500 have been recorded. They were once taught to children. Many of the signs deal with love affairs; those that deal with warfare and the sacred are kept secret. It is primarily used by the leopard secret society (also known as Ngbe or Egbo), which is found across the Ekoi, Efik, Igbo and related peoples.

Before the British colonization of the area, nsibidi was divided into a sacred version and a public, more decorative version which could be used by women. Aspects of colonization such as Western education and Christian doctrine drastically reduced the number of nsibidi-literate people, leaving the secret society members as some of the last literate in the symbols. Nsibidi was transported to Cuba and Haiti via the Atlantic slave trade, where it developed into the Anaforuana and Haitian Veve symbols.

'War'   'Child'   'Ézè'   'Tree'   'Root'

'Music'   'Snake'   'Country'   'Bank'

'Market' 'Entrance' 'Beauty' 'Chief' 'Feather' 'House' 'Leopard' 'Water'
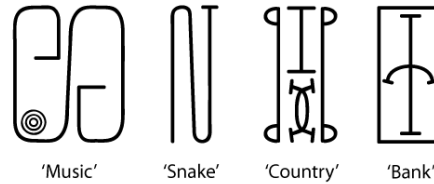
HISTORY

Nsibidi has a wide vocabulary of signs usually imprinted on calabashes, brass ware, textiles, wood sculptures, masquerade costumes, buildings and on human skin. Nsibidi has been described as a "fluid system" of communication consisting of hundreds of abstract and pictographic signs. Nsibidi crossed ethnic lines and was a uniting factor among ethnic groups in the Cross River region.

ORIGIN

The origin of nsibidi is most commonly attributed to the Ejagham people of the northern Cross River region, mostly because colonial administrators found the largest and most diverse nsibidi among them. Nsibidi spread throughout the region over time and mixed with other cultures and art forms such as the Igbo uli graphic design.
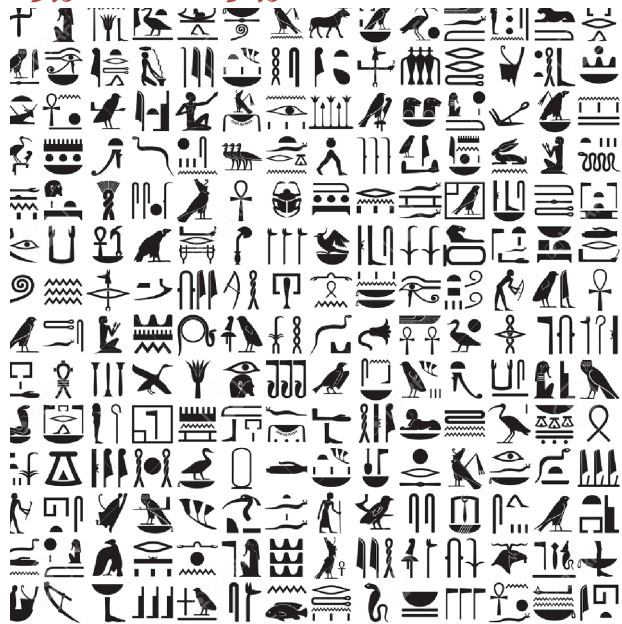

1   2   3   4   5
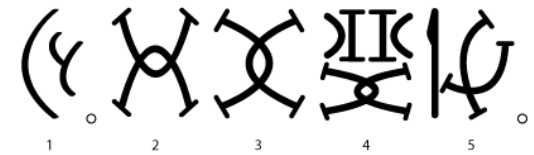
Welcome. Love Unity and Peace.

NSIBIDI TYPEFACES:

Egyptian hieroglyphs were a formal writing system used by the ancient Egyptians that combined logographic and alphabetic elements. Egyptians used cursive hieroglyphs for religious literature on papyrus and wood. Hieroglyphs are related to two other Egyptian scripts, hieratic and demotic. Early hieroglyphs date back as far as 3,300 BCE, and continued to be used up until the end of the fourth century CE, when non-Christian temples were closed and their monumental use was no longer necessary.

After the loss of the knowledge of hieroglyphic writing, the decipherment of hieroglyphs remained an enduring puzzle which would only be solved in the 1820s by Jean-Francois Champollion, with the help of the Rosetta Stone.

Visually hieroglyphs are all more or less figurative: they represent real or illusional elements, sometimes stylized and simplified, but all generally perfectly recognizable in form. However, the same sign can, according to context, be inter-preted in diverse ways: as a phonogram (phonetic reading), as a logogram, or as an ideogram. The determinative was not read as a phonetic constitu-ent, but facilitated understanding by differentiating the word from its homophones.

Hieroglyphs are written from right to left, from left to right, or from top to bottom, the usual direction being from right to left. The reader must consider the direction in which the asymmetrical hieroglyphs are turned in order to determine the proper reading order. For example, when human and animal Hieroglyphs face to the left (i.e., they look left), they must be read from left to right, and vice versa, the idea being that the Hieroglyphs face the beginning of the line.

As in many ancient writing systems, words are not separated by blanks or by punc-tuation marks. However, certain Hieroglyphs appear particularly common only at the end of words making it possible to readily distinguish words. As in the Arabic script, not all vowels were written in Egyptian Hieroglyphs; it is debat-able whether vowels were written at all.

DETERMINATIVES

Determinatives or semagrams (semantic sym-bols specifying meaning) are placed at the end of a word. These mute characters serve to clarify what the word is about, as homophonic glyphs are common. If a similar procedure existed in English, words with the same spelling would be followed by an indicator which would not be read but which would fine-tune the meaning: "retort [chemistry]" and retort [rhetoric]" would thus be distinguished.

A number of determinatives exist: divini-ties, humans, parts of the human body, animals, plants, etc. Certain determinatives possess a literal and a figurative meaning. For example, a roll of papyrus, is used to define "books" but also ab-stract ideas. The determinative of the plural is a shortcut to signal three occurrences of the word, that is to say, its plural. The doubling of a sign indicates its dual; the tripling of a sign indicates its plural. Multiple lines can indicate many or an exact number. Minus lines often denote little or lessor.

UNILITERAL SIGNS
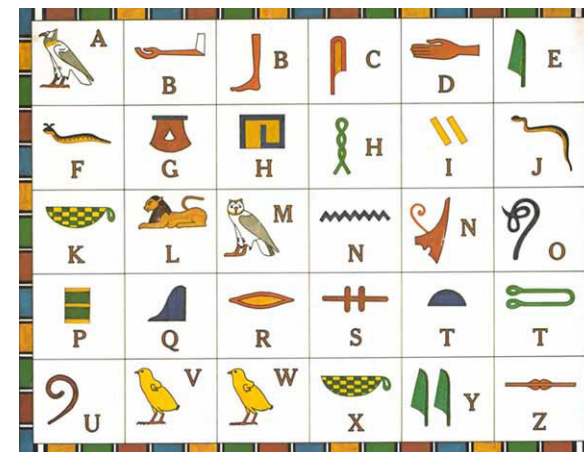
The Egyptian hieroglyphic script contained 24 uni-literals (symbols that stood for single consonants, much like letters in English). It would have been possible to write all Egyptian words in the manner of these signs, but the Egyptians never did so and never simplified their complex writing into a true alphabet.

CARTOUCHE

A cartouche is an oval with a horizontal line at one end, indicating that the text enclosed is a royal name, coming into use during the beginning of the Fourth Dynasty under Pharaoh Sneferu. While the cartouche is usually vertical with a horizon-tal line, it is sometimes horizontal if it makes the name fit better, with a vertical line on the left. The Ancient Egyptian word for it was shenu, and it

was essentially an expanded shen ring. In Demotic, the cartouche was reduced to a pair of brackets and a vertical line.

Rarely, the names of gods are placed within a cartouche; the two last names of the sitting king are always placed within a cartouche.
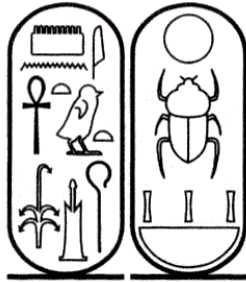
HIERATIC

Hieratic (literally "priestly") is a cursive writing system used in the provenance of the pharaohs in Egypt and Nubia. In the Proto-Dynastic Period of Egypt, hieratic first appeared and developed alongside the more formal hieroglyphic script. It is an error to view hieratic as a derivative of hieroglyphic writing. Indeed, the earliest texts from Egypt are produced with ink and brush, with no indication their signs are descendants of Hieroglyphs. True monumental Hieroglyphs carved in stone did not appear until the 1st Dynasty, well after hieratic had been established as a scribal practice. The two writing systems, therefore, are related, parallel developments, rather than a single linear one. It was primarily written in ink with a reed brush on papyrus, allowing scribes to write quickly without resorting to the time-consuming Hieroglyphs.

HIERATIC CHARACTERISTICS

Hieratic is noted for its cursive nature and use of ligatures for a number of characters. Hieratic script also uses a much more standardized orthography than Hieroglyphs; texts written in the latter often had to take into account extra-textual concerns, such as decorative uses and religious concerns that were not present in, say, a tax receipt. There are also some signs that are unique to hieratic, though Egyptologists have invented equivalent hiero-

glyphic forms for hieroglyphic transcriptions and typesetting.

Hieratic is often present in any given period in two forms, a highly ligatured, cursive script used for administrative documents, and a broad uncial book-hand used for literary, scientific, and religious texts. These two forms can often be significantly different from one another. Letters, in particular, used very cursive forms for quick writing, often with large numbers of abbreviations for formulaic phrases, similar to shorthand.

LATE EGYPTIAN HIERATIC
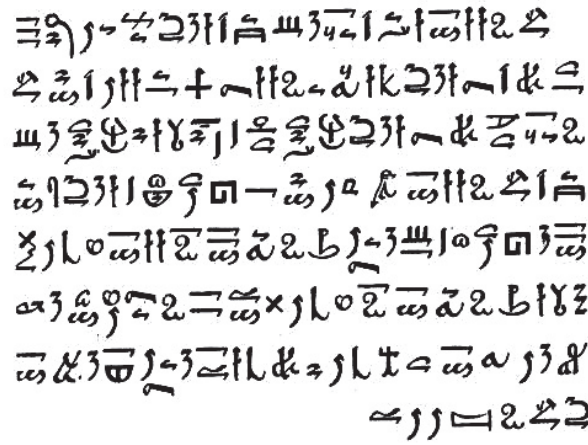
DEMOTIC

Demotic (popular) is the ancient Egyptian script derived from northern forms of hieratic used in the Nile Delta, and the stage of the Egyptian language written in this script, following Late Egyptian and preceding Coptic. The term was first used by the Greek historian Herodotus to distinguish it from hieratic and hieroglyphic scripts.

The Demotic script was referred to by the Egyptians as sš n š'.t "document writing", which the 2nd century scholar Clement of Alexandria called "letter writing", while early Western scholars, notably Thomas Young, formerly referred to

it as "Enchorial Egyptian". The script was used for more than a thousand years, and during that time a number of developmental stages occurred. It is written and read from right to left, while earlier hieroglyphics could be written from top to bottom, left to right, or right to left.

LATER EGYPTIAN DEMOTIC
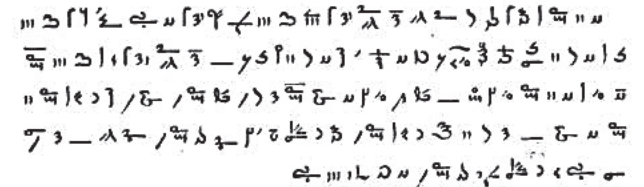
RELATIONSHIP OF THE THREE STYLES

Hieroglyphic	Hieroglyphic Book Hand	Hieratic	Demotic
2700-2600 B.C.	ca. 1500 B.C.	ca. 1500 B.C.	ca. 1900 B.C.	ca. 200 B.C.	400-100 B.C.

The Island Cultures

Aboriginal (Australia)

The indigenous peoples of Australia had no written language but has a rich oral tradition where symbols play a vivid role in storytelling. Many of the symbols used by Aboriginal artists are a variation of lines or dots. Similar symbols can have multiple meanings according to the art region and the elaborate combination of these can tell complex stories.

Emu Track / Spear — Rainbow /Cloud — Possum Track — Rain — Star / Sun

Waterhole /Campsite — Fire / Smoke Water — Kangaroo Track — Human Track — Man /Woman

Hanunóo (South Philippines)

The Hanunóo script is used by the Mangyan people in the mountains of Mindoro, South Philippines, to write the Hanunóo language. Perhaps due to its inaccessible location, it is one of the few indigenous Philippine scripts which has not been replaced by the Latin script. It is of Brahmic origin, descended through Old Kawi, although its history is difficult to trace in detail due to the perishable nature of bamboo, the surface on which it is traditionally inscribed. The script is an abugida, in which each of the 15 consonants has an inherent [a] vowel. The other two vowels in the inventory, [i] and [u], are marked syllable-finally by a diacritic positioned above or below (or to the left or right of) the syllable, often forming a ligature. There are also three vowel character ligatures.
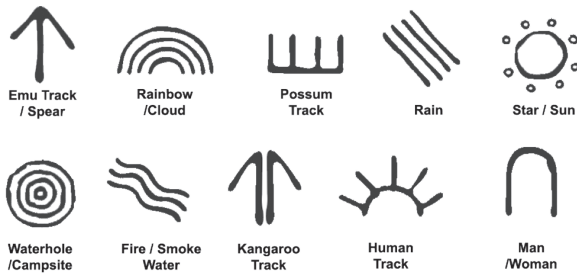
The Hanunóo script is unusual in that it is written in upward - that is, away from the

a	i	u	ka	ki	ku	ga	gi	gu	nga	ngi	ngu
ta	ti	tu	da	di	du	na	ni	nu	pa	pi	pu
ba	bi	bu	ma	mi	mu	ya	yi	yu	la	li	lu
ra	ri	ru	wa	wi	wu	sa	si	su	ha	hi	hu

body - vertical columns which are read from left to right. The Hanunóo can typically read with equal skill in all directions, so characters can be orientated either horizontally or vertically within these columns, as long as they are consistent throughout the text.

Rongorongo (Easter Island)

The Rongorongo writing was first discovered by Eugène Eyraud, a lay friar of the Roman Catholic Church, who went to Easter Island as a missionary on January 2, 1864. In an account of his visit, he wrote of his discovery of twenty-six wooden tablets containing unusual inscriptions.

The name Rongorongo comes from the Rapa Nui language, which is the native language of Easter Island, and means "to recite, to declaim, to chant out."

The glyphs are written in-between lines that run across the tablets. Some tablets are "fluted" with the inscriptions falling within the channels created by the fluting. The Rongorongo images are shaped like humans, animals, plants, and geometric forms. Every symbol that contains a head is oriented with the head facing up, and either facing forward, or profiling to the right. Each symbol is approximately 1 centimeter high. The orientation of the writing is read from left to right, bottom to top. This is known as reverse boustrophedon. According to oral tradition, the tools used to make the carvings were obsidian flakes or small shark teeth.

Deciphering the glyphs has proven difficult because of the lack of context to the writing and no other similar writing systems are known of today.
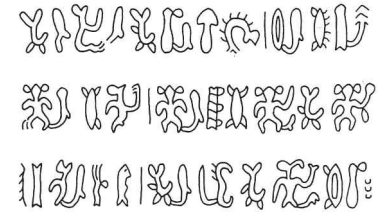
Aksara Sunda Kuna (Sudanese)

Sundanese is a Malayo-Polynesian language spoken by about 39 million people mainly in western Java in Indonesia. It is the third most-spoken language in Indonesia. Sundanese is closely related to Madurese and Malay, and more distantly related to Javanese.

Sundanese script (Aksara Sunda) Sundanese is normally written with the Latin alphabet, however the Sundanese script is still used to some extent. The Sundanese script developed from the Old Sundanese script (Aksara Sunda Kuna), which was used between the 14th and 18th centuries, and was standardized during the 1990s. Sundanese has also been written with a version of the Arabic script known as Pegon, and with the Javanese alphabet.

Notable Features

Type of writing system: syllabic alphabet in which each consonant has an inherent vowel. Other vowels are indicated by separate letter or by diacritics. Direction of writing: left to right in horizontal lines.

ka	ga	nga	ca	ja	nya	ta	da	na
[ka]	[ga]	[ŋa]	[tʃa]	[dʒa]	[ɲa]	[ta]	[da]	[na]

pa	ba	ma	ya	ra	la	wa	sa	ha
[pa]	[ba]	[ma]	[ja]	[ra]	[la]	[wa]	[sa]	[ha]

Consonants for foreign words

fa	qa	va	xa	za
[fa]	[qa]	[va]	[ksa]	[za]

Additional consonants

kha	sya
[xa]	[ʃa]

a	é	i	o	u	e	eu
[a]	[ɛ]	[i]	[ɔ]	[u]	[ə]	[ɤ]

ka	ké	ki	ko	ku	ke	keu

kar	kang	kra	kla	kya	kah	k

0	1	2	3	4	5	6	7	8	9

Sudanese Writings:

77ꠃꠤ2 ꠂ/ꠂꠃ ꠂ/ꠂ ꠃ ꠃ/ꠃꠃ, ꠂ/ꠂ ꠃꠃ
ꠃ/ꠃꠃ2 ꠃꠃꠃ.ꠃ/ꠃ ꠃꠃ ꠃꠃꠃꠃ, ꠃꠃꠃꠃꠃꠃ
ꠃ/ꠃꠃꠃ–ꠃ/ꠃꠃꠃ ꠃꠃ ꠃꠃꠃꠃ. ꠃꠃꠃꠃꠃꠃ ꠃꠃꠃꠃ ꠃꠃꠃꠃꠃ, ꠃꠃ
ꠃꠃꠃ ꠃꠃꠃꠃ, ꠃꠃꠃꠃꠃ–ꠃꠃꠃꠃ ꠃꠃ ꠃꠃꠃꠃꠃ ꠃꠃ ꠃꠃꠃ
ꠃꠃꠃꠃꠃ, ꠃꠃꠃꠃꠃꠃ.

Tagalog (Philippines)

Tagalog is the most widely spoken tongue in the Philippines today. Nowadays it is written in a Roman alphabet, but prior to Spanish colonial rule, Tagalog speakers employed a syllabic alphabet named Baybayin to record their language.

The Tagalog Baybayin is one of the many indigenous scripts of pre-colonial Philippines. The development of scripts in Philippines remains somewhat of a mystery due to destruction of native literature by Spanish authorities as well as poor preservation of the plant-based writing material in the Tropics. It is thought that scripts in Philippines derived from the Kawi script of Java around the 14th century CE. Ultimately, scripts in the Philippines derive from Brahmic scripts.

ki	gi	ngi	ti	di	ni	pi

bi	mi	yi	li	wi	si	hi

ku	gu	ngu	tu	du	nu	pu

bu	mu	yu	lu	wu	su	hu

a	e/i	o/u	ka	ga	nga

ta	da	na	pa	ba	ma

ya	la	wa	sa	ha

Kawi (Javanese)

Writing came to Insular Southeast Asia in the 8th century, brought by traders from the ancient Indian kingdom of Pallava. The Pallava script, a variant of the Grantha, was adopted by the local Javanese to write their language. While at first the script completely resembled Pallava, soon it evolved into a distinctive form called the Kawi script.

Geographically, Kawi was found primarily on Java, Bali, and southern Sumatra, but a few inscriptions have been found as far as the Philippines.

The Kawi script is a typical Brahmic-style syllabic alphabet where every letter represents a syllable rather than a simple sound.

a	i	u	ka	ga	nga	ca	ja	ña	tha	dha	ta	da

na	pa	ba	ma	ya	ra	la	wa	śa	ṣa	sa	ha

ta	tə	ti	tu	te	to	tā	tai	tang	taḥ	t

kta	mba	dhwa	śra	tra	sya

Lontara (Indonesian)

Mandar is spoken by about 480,000 people in West Sulawesi province in Indonesia, particularly in Mamuju, Majene, and Polewali Mandar (Polman) regencies. It belongs to the South Sulawesi group of Malayo-Polynesian languages and is also known as Andian, Manjar and Mandharsche.

Mandar was formerly written with the Lontara script, but is now written with a version of the Latin alphabet.

ka	ga	nga	ngka	pa	ba	ma	mpa	ta	da	na	nra
[ka]	[ga]	[ŋa]	[ŋka]	[pa]	[ba]	[ma]	[mpa]	[ta]	[da]	[na]	[nra]

ca	ja	nya	nca	ya	ra	la	wa	sa	a	ha
[tʃa]	[dʒa]	[na]	[ntʃa]	[ja]	[ra]	[la]	[wa]	[sa]	[a]	[ha]

Writing and Lettering Terms:

ABJAD - An abjad is a type of writing system where each symbol stands for a consonant, leaving the reader to supply the appropriate vowel. It is a term suggested by Peter T. Daniels to replace the common terms "consonantary", "consonantal alphabet" or "syllabary" to refer to the family of scripts called West Semitic.

ACCENT - a mark to note how a written language sound should be spoken correctly when not evident in the character itself.

ABUGIDA - A term used for a script whose basic signs denote consonants with an inherent vowel and where consistent modifications of the basic sign indicate other following vowels than the inherent one.

ALPHABET - A set of letters or other characters with which one or more languages are written especially if arranged in a customary order or a system of signs or signals that serve as equivalents for letters. Letters are often referred to as characters.

CALLIGRAPHY - The art of making beautiful, artistic, stylized, or elegant handwriting or lettering.

CAPITALS - A capital letter (or uppercase) is the form of an alphabetical letter used to begin a sentence or proper noun. It is a way of assigning importance to a word or words.

CASE - Uppercase characters are capital letters; lowercase characters are small letters. For example, box is in lowercase while BOX is in uppercase. The term is a vestige of the days when typesetters kept capital letters in a box above the lowercase letters.

CONSONANT - A consonant is a speech sound that is not a vowel. It also refers to letters of the alphabet that represent those sounds.

CURSIVE - Also known as longhand, script, handwriting, looped writing, joined-up writing, joint writing, or running writing is any style of penmanship in which the symbols of the language are written in a conjoined and/or flowing manner, generally for the purpose of making writing faster.

DETERMINATIVE - Signs or symbols that go with the main glyph to tell the reader about how to interpret the glyph. Some diacritical marks, such as the acute (´) and grave (`), are often called accents.

DIACRITICS - A sign, such as an accent or cedilla, which when written above or below a letter indicates a difference in pronunciation from the same letter when unmarked or differently marked.

DIAGRAPHS & TRIGRAPHS - A digraph or digram (from the Greek dís, "double" and gráph, "to write") is a pair of characters used in the orthography of a language to write either a single phoneme (distinct sound), or a sequence of phonemes that does not correspond to the normal values of the two characters combined. A trigraph is the same but with three characters acting as the phoneme.

DIPHTHONGS - A diphthong is a sound made by combining two vowels, specifically when it starts as one vowel sound and goes to another, like the oy sound in oil. Diphthong comes from the Greek word diphthongos which means "having two sounds."

FLOURISH OR SWASH - A bold or extravagant character made especially to attract attention.

FONT & TYPEFACE - A font is a set of printable or consistent text characters in a specific style and size. The type design for a set of fonts is the typeface and variations of this design form the typeface family. Thus, Helvetica is a typeface family, Helvetica italic is a typeface, and Helvetica italic 10-point is a font. In practice, font and typeface are often used without much precision, sometimes interchangably. Typestyle can also mix in these terms.

GEMATRIA - Finding numerical relationships between words and phrases. Using letters to represent numbers, and in turn, using the numbers to represent things.

GLYPH - In typography, a glyph is an elemental symbol within an agreed set of symbols, intended to represent a readable character for the purposes of writing. As such, glyphs are considered to be unique marks that collectively add up to the spelling of a word, or otherwise contribute to a specific meaning of what is written, with that meaning dependent on culture. Interchangeable with character.

HIEROGLYPHS - a stylized picture of an object representing a word, syllable, or sound, as found in ancient Egyptian and other writing systems.

IDEOGRAM OR IDEOGRAPHIC - A graphic symbol that represents an idea or concept, independent of any particular language, and specific words or phrases.

LIGATURE - A ligature occurs where two or more letters are joined as a single glyph. An example is the character æ as used in English, in which the letters a and e are joined.
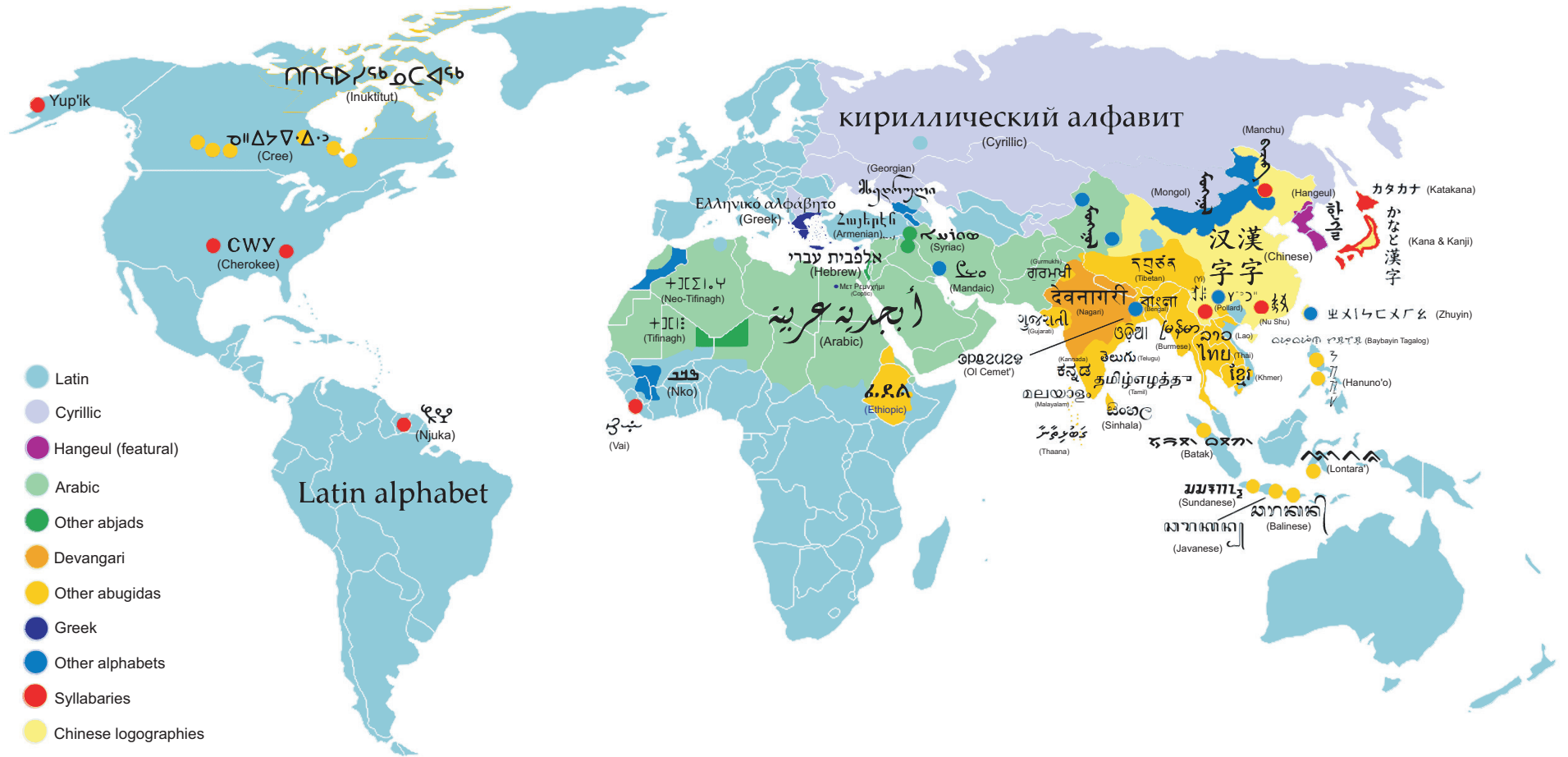
LOGOGRAPH - Writing Systems. are those where the graphemes [the smallest written unit of the language] represent words. The best-known cases are Chinese, and its derivative script, Japanese kanji. The symbols are variously referred to as logographs, logograms, or characters.

NUMERALS - Written number or counting symbols.

PHONOGRAM OR PHONOLOGICAL - A symbol representing a vocal sound.

PRINTED WRITING - Block letters (known as print script, manuscript, print writing or ball and stick in academics) are a sans-serif (or "gothic") style of writing Latin script in which the letters are individual glyphs, with no joining.

ᛏᚼᛁᛋ ᚼᛗᚼᛏᛁᛉᛏ ᚠᚱᚱᛒᚢ ᚢᛒᚱ ᛏᚼᛗ ᚼᛆᚱᚾᛗᚱᛁᚼᛑ ᛒᚢ ᚱᚾᛏᛘᛋ

Distribution of Writing Systems

ᑎᑎᐊᐅᕈᑕᐤᓄᑕᐃ᙭
(Inuktitut)

кириллический алфавит
(Cyrillic)

(Manchu)

ᐅᒐᐅᐁᐯ᙮
(Cree)

(Mongol)

(Hangeul)

カタカナ (Katakana)

Yup'ik

(Georgian)

Ελληνικο αλφαβητο
(Greek)

Հայերէն
(Armenian)

ܣܘܪܝܬ
(Syriac)

汉漢
字字
(Chinese)

한글
(Hangeul)

かなと漢字
(Kana & Kanji)

ᑕᐦᐯ
(Cherokee)

אלפבית עברי
(Hebrew)

ܡܢܕܝܐ
(Mandaic)

ᐸᑲᓭᐤ
(Tibetan)

ꆈꌠꁱꂷ
(Yi)

(Pollard)

Ⱬ (Nu Shu)

ꚛ ꚝ ꚗ ꚕ ꚓ ꚑ ꚏ ꚍ (Zhuyin)

+Ξⵍⵓⵏ
(Neo-Tifinagh)

Мет Ремҳ̄йни
(Coptic)

ਗੁਰਮੁਖੀ
(Gurmukh)

देवनागरी
(Nagari)

বাংলা
(Bengali)

(Lao)

ᩃᩢᩉ᩠ᩅᩫᩬᩮ ᩉᩢᩴᩣ ᨣᨮᨶ (Baybayin Tagalog)

+Ξⵍⵉ
(Tifinagh)

أبجدية عربية
(Arabic)

ગુજરાતી
(Gujarati)

ଓଡ଼ିଆ
(Burmese)

ไทย
(Thai)

ខ្មែរ
(Khmer)

ᜪᜪᜪ
(Hanuno'o)

�ꋼ
(Ol Cemet')

ಕನ್ನಡ
(Kannada)

తెలుగు
(Telugu)

தமிழ்மொழித்த
(Tamil)

ᖃᑌ
(Nko)

ᚴᚯᚱ
(Vai)

ፊደል
(Ethiopic)

മലയാളം
(Malayalam)

සිංහල
(Sinhala)

ᮞᮥᮔᳪ
(Batak)

ᜋᜒᜈᜅ
(Lontara')

ދިވެހި
(Thaana)

ᮞᮥᮔᳪᮓ
(Sundanese)

ᬩᬮᬶᬦᬾᬲᬾ
(Balinese)

ꦗꦮ
(Javanese)

ᜃ᠋ᜈ᠋
(Njuka)

Latin alphabet

Legend

- 🔵 Latin
- 🟣 Cyrillic
- 🟪 Hangeul (featural)
- 🟢 Arabic
- 🟢 Other abjads
- 🟠 Devangari
- 🟡 Other abugidas
- 🔵 Greek
- 🔵 Other alphabets
- 🔴 Syllabaries
- 🟡 Chinese logographies

PUNCTUATION - The use of spacing, conventional signs, and certain typographical devices as aids to the understanding and the correct reading, both silently and aloud, of handwritten and printed texts.

SACRED WRITING - Alphabetical systems where meanings are assigned to each letter of the writing system. Germanic Runes and Hebrew are examples.

SCRIPT - Script typefaces are based upon the varied and often fluid stroke created by handwriting, like the cursive fonts just typically more elegant.

SEMAGRAMS - A semantic symbol (picture or glyph) associated with a concept.

SERIF - A small line attached to the end of a stroke in a letter or symbol. A typeface with serifs is called a serif typeface (or serifed typeface). A typeface without serifs is called sans serif or sans-serif, from the French sans, meaning "without."

SYLLABARY - A set of written characters representing syllables and (in some languages or stages of writing) serving the purpose of an alphabet.

RUNES - A mark or letter of mysterious or magic significance.

VOWEL - A speech sound made by the vocal cords. A vowel sound comes from the lungs, through the vocal cords; is not blocked, so there is no friction.

WRITING SYSTEM - A writing system is any conventional method of visually representing verbal communication. It usually has a large number of consistent rules and concepts that govern its form.