

History of writing systems

LIN 3130 A
December 1, 2005

Chinese pictographs

early	𠤎	𡗗	☉	☾
modern	人	女	日	月
	/rén/ 'man'	/nǚ/ 'woman'	/rì/ 'sun'	/yuè/ 'moon'

Development of 'horse' pictograph



Modern character 'horse'



Simplified character now used in mainland China

Chinese abstract ideographs

early	一	二	三	上	下
modern	一	二	三	上	下
	/yī/ 'one'	/èr/ 'two'	/sān/ 'three'	/shàng/ 'above'	/xià/ 'below'

Semantic-phonetic compounds

女 + 馬 = 媽

nu(3) + ma(3) = ma(1)
MEANING SOUND
woman horse = mother

Semantic-phonetic compounds

Word	Gloss	Semantic element
瑪	/mǎ/ 'agate'	玉 'gem'
碼	/mǎ/ 'weights'	石 'stone'
螞	/mǎ/ 'grasshopper'	虫 'insect, reptile'
罵	/mà/ 'scold'	口 'mouth' (twice)

Semantic-semantic compounds

好=女+子 good = woman + son
 安=宀+女 peace = roof + woman
 家=宀+豕 home = roof + pig
 男=力+田 male = strength + field

Semantic-semantic compounds

明=日+月 bright = sun + moon
 休=人+木 rest = person + tree
 林=木+木 grove = tree + tree
 森=木+林 forest = tree + grove



Japanese Kana examples

	Hiragana	Katakana
ko	こ from 己	コ from 己
ke	け from 計	ケ from 介
ku	く from 久	ク from 久
a	あ from 安	ア from 阿

Japanese katakana



Japanese katakana



[f(u)][a] [i] [n] [d(e)][i] [n] [gu]

Japanese mixed system



Japanese mixed system

ちなみに、
 僕の帽子は
 ハコフグで〜す。

chi.na.mi.ni,
 bo.ku-no bō.shi-wa
 ha.ko- fu.gu de:.su.

By-the-way,
 hat-of me-TOPIC
 box-fugu (boxfish) is.

blue: hiragana
 purple: Chinese characters
 pink: katakana
 black: punctuation

Boxfish (a type of *fugu* fish)



Borrowed words in katakana



Coca-Cola trademark registration

Coca-Cola

Spencerian script





SPENCERIAN SCRIPT.

Atlanta P. Rogers & Co. Cutlers
 Detroit & Square F. Dutton & Co.
 E. Grafton & Co. Newbury & Co. Newton

©1880



Korean is essentially phonemic

labial <m>
dental <ɰ>
alveolar <ɳ>
velar <ŋ>
glottal

		Vowels										
		ㅏ	ㅑ	ㅓ	ㅕ	ㅗ	ㅛ	ㅜ	ㅠ	ㅡ	ㅣ	
Consonants	ㄱ	g(k)	가	갸	거	겨	고	교	구	규	그	기
	ㄴ	n	나	냐	너	녀	노	뇨	누	뉴	느	니
	ㄷ	d	다	댜	더	더	도	뇨	두	듀	드	디
	ㄹ	l	라	랴	러	려	로	료	루	류	르	리
	ㅁ	m	마	먀	머	며	모	묘	무	뮤	므	미
	ㅂ	b	바	뵤	버	벼	보	뵤	부	뷰	브	비
	ㅅ	s	사	샤	서	셔	소	쇼	수	슈	스	시
	ㅇ		아	야	어	여	오	요	우	유	으	이
	ㅈ	j	차	챤	저	져	초	쵸	추	쵸	츠	치
	ㅋ	k	카	캬	커	켜	코	쿄	쿠	큐	크	키
	ㅌ	t	타	탤	터	테	토	토크	투	투	트	티
	ㅍ	p	파	���	퍼	페	포	포	푸	푸	프	피
	ㅎ	h	하	햤	허	헤	호	호	후	후	호	히

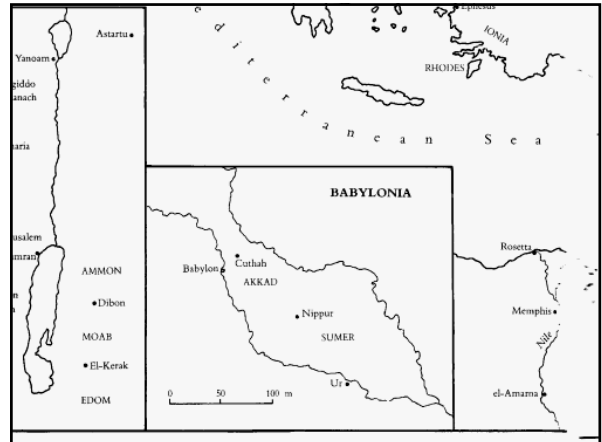
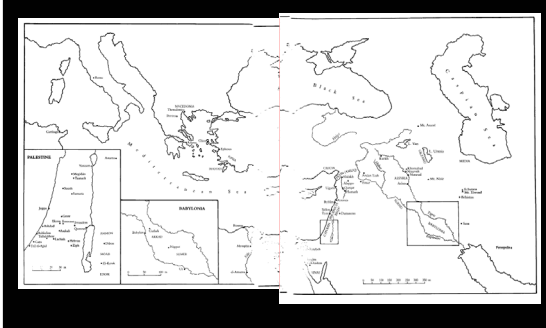
Korean spelled using alphabetic characters grouped into syllables

ㅏ ㅑ ㅓ ㅕ ㅗ ㅛ ㅜ ㅠ ㅡ ㅣ
ko no to ro mo po so o cho chho
 ㅑ ㅓ ㅕ ㅗ ㅛ ㅜ ㅠ ㅡ ㅣ
kho tho pho ho 'ko 'to 'po 'so 'cho

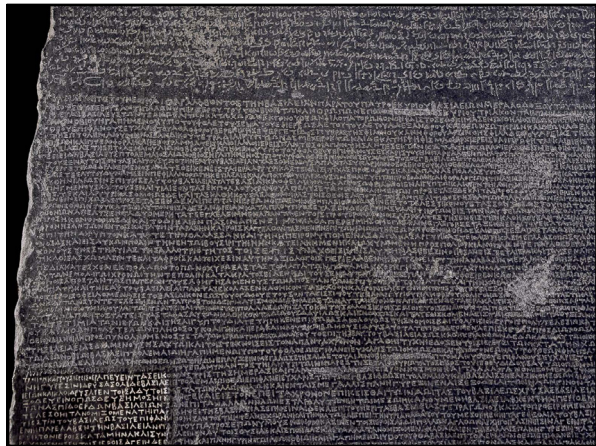
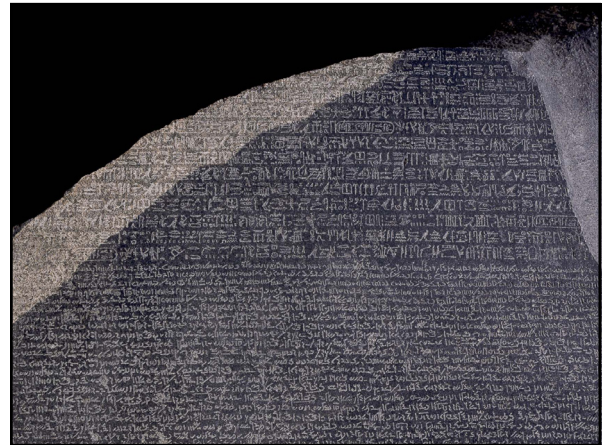
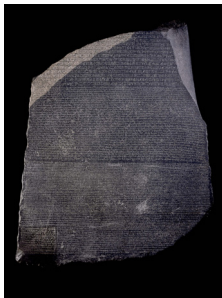
가	갸	거	겨	고	교	구	규	그
ka	kya	ko	kyo	ko	kyo	ku	kyu	ku
기	개	게	계	계	괴	귀	괴	과
ki	ke	kye	ke	kye	ko	ki	kwi	kwa
꿔	꽤	퀘						
kwo	kwe	kwe						

각	간	간	갈	감	갑	갓	강	갓
kak	kan	kat	kal	kam	kap	kat	kang	kat
갓	갈	갈	강	갑	갓			
kat	kat	kap	ka'	kak	kap	kat		

The Ancient Middle East



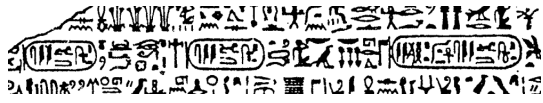
Rosetta Stone



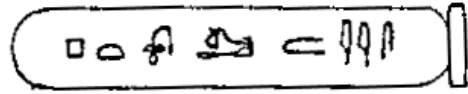
Rosetta Stone hieroglyphics



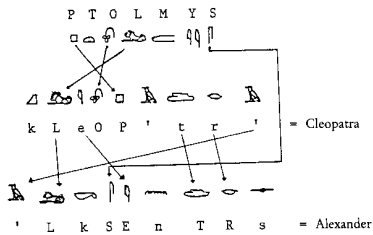
Rosetta Stone hieroglyphics



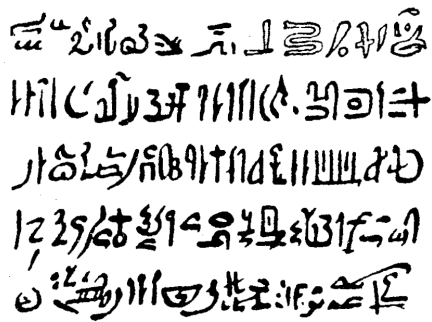
Name in a cartouche



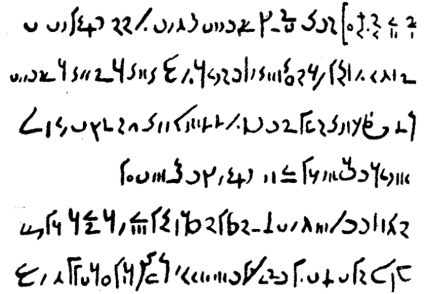
P T O L M Y S



HIEROGLYPHICS. Ancient Egyptian ideograms established in the 31st century B.C. One of the oldest writing systems. (Wallis)



HIERATICS. A cursive style of hieroglyphic used by priests in the ancient Egyptian Empire. (Gilyarevsky)

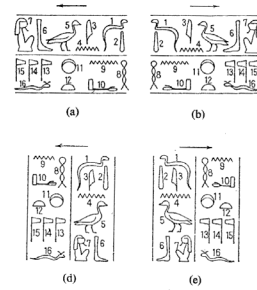


DEMOTIC. A more cursive style than Hieratic, used by the common people of the ancient Egyptian Empire. (Gilyarevsky)

Forms of Old Egyptian

Hieroglyphic				Hieratic				Demotic			

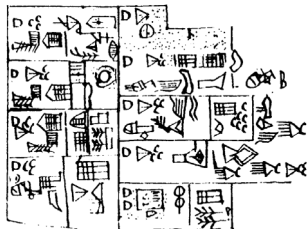
Hieroglyphic writing direction varies



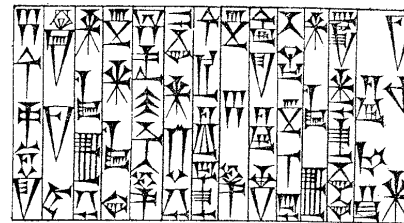
Cuneiform (about 3000 BC)



Sumerian



SUMERIAN PICTOGRAMS. The oldest human writing was invented in Mesopotamia about the 32nd century B.C. (Sug)



BABYLONIAN CUNEIFORM SCRIPT. Part of Hammurabi Code of Laws from the 18th century B.C. It shows the writing of the ancient Babylonian Empire. (Sug)



ASSYRIAN CUNEIFORM SCRIPT. Writing from the ancient Assyrian Empire. It is essentially the same as Babylonian cuneiform script. (Sugi)

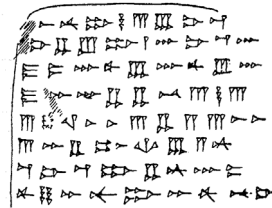
Assyrian tribute list



Assyrian: Epic of Gilgamesh

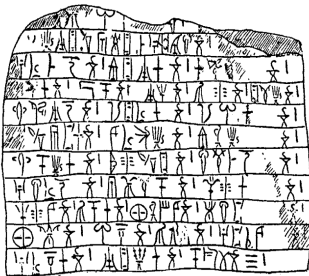


Ugaritic

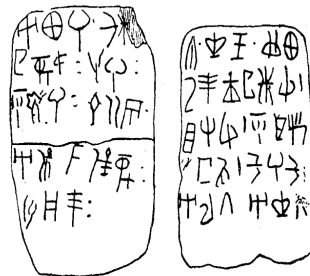


UGARITIC CUNEIFORM SCRIPT. Cuneiform alphabet discovered at Ras Shamrah in North Syria. Dated around the 15th century b.c. (Ichikawa)

Linear B (Crete)



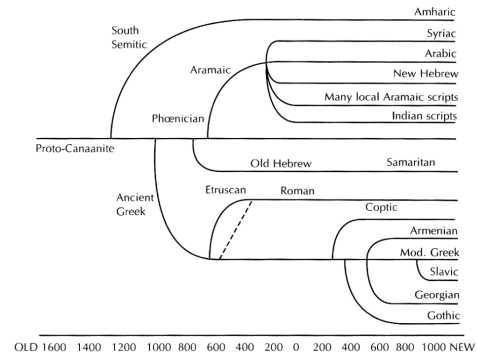
Linear A (Crete)



Egyptian origins of Semitic writing

Egyptian hieroglyphic	Sinai script	Early Semitic	Name of letter
			ʾaleph 'ox'
			bet 'house'
			waw 'hook'
			kaph 'open hand'
			mem 'water'
			nahas 'snake'
			ʿajin 'eye'

Figure 7.2 Some examples of the Egyptian sources of Semitic letters according to *ordmer (1916) and Albright (1966)



Greek alphabet (first with vowels)

CAPITAL	<i>A</i>	<i>B</i>	<i>Γ</i>	<i>Δ</i>	<i>E</i>	<i>Z</i>	<i>H</i>	<i>Θ</i>
SMALL	<i>α</i>	<i>β</i>	<i>γ</i>	<i>δ</i>	<i>ε</i>	<i>ζ</i>	<i>η</i>	<i>θ</i>
PHON.	<i>a</i>	<i>v</i>	<i>g,y</i>	<i>d</i>	<i>e</i>	<i>z</i>	<i>i</i>	<i>s</i>
	<i>I</i>	<i>K</i>	<i>Λ</i>	<i>M</i>	<i>N</i>	<i>Ξ</i>	<i>O</i>	<i>Π</i>
	<i>ι</i>	<i>κ</i>	<i>λ</i>	<i>μ</i>	<i>ν</i>	<i>ξ</i>	<i>ο</i>	<i>π</i>
	<i>i</i>	<i>k</i>	<i>l</i>	<i>m</i>	<i>n</i>	<i>ks</i>	<i>o</i>	<i>p</i>
	<i>P</i>	<i>Σ</i>	<i>T</i>	<i>Υ</i>	<i>Φ</i>	<i>X</i>	<i>Ψ</i>	<i>Ω</i>
	<i>ρ</i>	<i>σ,s</i>	<i>τ</i>	<i>υ</i>	<i>φ</i>	<i>χ</i>	<i>ψ</i>	<i>ω</i>
	<i>r</i>	<i>s,z</i>	<i>t</i>	<i>i</i>	<i>f</i>	<i>x</i>	<i>ps</i>	<i>o</i>

Russian alphabet

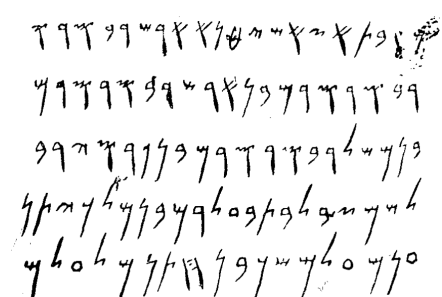
ROMAN: CAPITAL	<i>A</i>	<i>Б</i>	<i>В</i>	<i>Г</i>	<i>Д</i>	<i>Е</i>	<i>Ё</i>	<i>Ж</i>	<i>З</i>			
SMALL	<i>а</i>	<i>б</i>	<i>в</i>	<i>г</i>	<i>д</i>	<i>е</i>	<i>ё</i>	<i>ж</i>	<i>з</i>			
ITALIC: CAPITAL	<i>A</i>	<i>Б</i>	<i>В</i>	<i>Г</i>	<i>Д</i>	<i>Е</i>	<i>Ё</i>	<i>Ж</i>	<i>З</i>			
SMALL	<i>a</i>	<i>б</i>	<i>в</i>	<i>г</i>	<i>д</i>	<i>е</i>	<i>ё</i>	<i>ж</i>	<i>з</i>			
PHONETIC VALUE	<i>a</i>	<i>b</i>	<i>v</i>	<i>g</i>	<i>d</i>	<i>ye</i>	<i>yo</i>	<i>j</i>	<i>z</i>			
	<i>И</i>	<i>Й</i>	<i>К</i>	<i>Л</i>	<i>М</i>	<i>Н</i>	<i>О</i>	<i>П</i>	<i>Р</i>	<i>С</i>	<i>Т</i>	<i>У</i>
	<i>и</i>	<i>й</i>	<i>к</i>	<i>л</i>	<i>м</i>	<i>н</i>	<i>о</i>	<i>п</i>	<i>р</i>	<i>с</i>	<i>т</i>	<i>у</i>
	<i>И</i>	<i>Й</i>	<i>К</i>	<i>Л</i>	<i>М</i>	<i>Н</i>	<i>О</i>	<i>П</i>	<i>Р</i>	<i>С</i>	<i>Т</i>	<i>У</i>
	<i>и</i>	<i>й</i>	<i>к</i>	<i>л</i>	<i>м</i>	<i>н</i>	<i>о</i>	<i>п</i>	<i>р</i>	<i>с</i>	<i>т</i>	<i>у</i>
	<i>и</i>	<i>й</i>	<i>к</i>	<i>л</i>	<i>м</i>	<i>н</i>	<i>о</i>	<i>р</i>	<i>с</i>	<i>т</i>	<i>у</i>	
	<i>Ф</i>	<i>Х</i>	<i>Ц</i>	<i>Ч</i>	<i>Ш</i>	<i>Щ</i>	<i>Ъ</i>	<i>Ь</i>	<i>Э</i>	<i>Ю</i>	<i>Я</i>	
	<i>ф</i>	<i>х</i>	<i>ц</i>	<i>ч</i>	<i>ш</i>	<i>щ</i>	<i>ъ</i>	<i>ь</i>	<i>э</i>	<i>ю</i>	<i>я</i>	
	<i>Ф</i>	<i>Х</i>	<i>Ц</i>	<i>Ч</i>	<i>Ш</i>	<i>Щ</i>	<i>Ъ</i>	<i>Ь</i>	<i>Э</i>	<i>Ю</i>	<i>Я</i>	
	<i>ф</i>	<i>х</i>	<i>ц</i>	<i>ч</i>	<i>ш</i>	<i>щ</i>	<i>ъ</i>	<i>ь</i>	<i>э</i>	<i>ю</i>	<i>я</i>	
	<i>ф</i>	<i>х</i>	<i>ц</i>	<i>ч</i>	<i>ш</i>	<i>щ</i>	<i>ъ</i>	<i>ь</i>	<i>э</i>	<i>ю</i>	<i>я</i>	
	<i>f</i>	<i>x</i>	<i>ts</i>	<i>ch</i>	<i>sh</i>	<i>shch</i>	<i>- ai</i>	<i>- e</i>	<i>yu</i>	<i>ya</i>		

Boustrophedon writing order (Greek example)

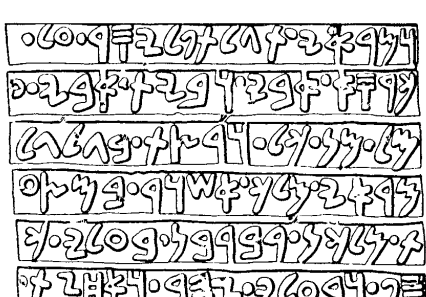


"Hittite" Hieroglyphics





PHOENICIAN SCRIPT. The writing of ancient Phoenicia consisted of twenty-two letters and was the basis of Western alphabets. (Gelb)

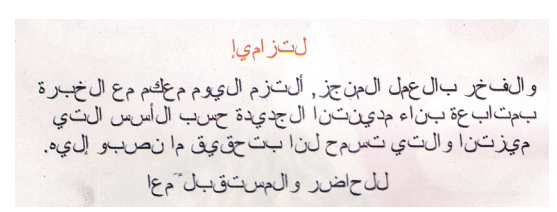


ARAMAIC SCRIPT. Aram was a state in ancient Syria. This writing was the basis of Eastern alphabets. (Kato)

Arabic writing usually writes only consonants (connected forms)

ش.....ش	ش	š	šin
ص.....ص	ص	s	sad
ض.....ض	ض	z	zad
ط.....ط	ط	t	ta
ظ.....ظ	ظ	z	za
ع.....ع	ع	ʿ	ain
غ.....غ	غ	q	qain
ف.....ف	ف	f	fa
ق.....ق	ق	q	qaf
ك.....ك	ك	k	kaf

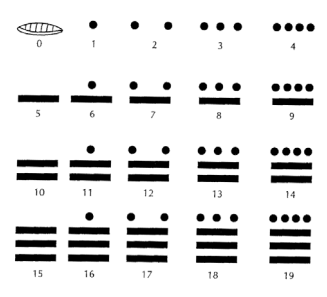
Ducharme's brochure (wrong)



Ducharme's Website (correct)

تعهدني
متسلحاً بقوة تجربتي
ومع شعور بالرضا عن عمل منجز كما يجب،
أتعهد اليوم بمتابعة عملية بناء مدينتنا
على الأسس التي تميزنا
والتي تتيح لنا الوصول إلى الأفضل.
معاً، لليوم وللمستقبل.
ايف دو شارم

Mayan numbers



Mayan hieroglyphs

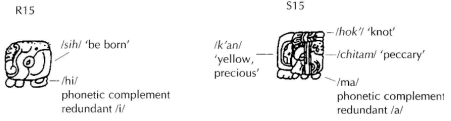
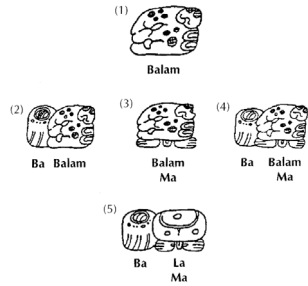


Figure 12.8 The verb and subject of Text S13-17 (from Dr. Merle Greene Robertson, *The Sculpture of Palenque*, Vol. IV, S13/17 (including R14-R17), Princeton: Princeton University Press, 1991. © 1976 by Merle Greene Robertson. Reproduced with permission)

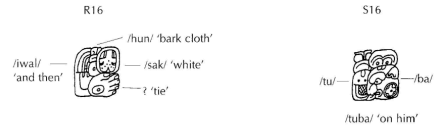


Figure 12.9 The second verbal phrase of Text S13-17 (from Dr. Merle Greene Robertson, *The Sculpture of Palenque*, Vol. IV, S13/17 (including R14-R17), Princeton: Princeton University Press, 1991. © 1976 by Merle Greene Robertson. Reproduced with permission)

Cree syllabics (Canadian)

Table 13.4 The symbols of Cree

	e	i	o	a	Final	
					West	East
∅	∇	△	▷	◁		
p	∨	∧	>	<		
t	U	∩	∪	∩		c
c	∩	∪	∩	∪		c
k	9	∩	∪	∩		v
m	7	∩	∪	∩		v
n	∩	∪	∩	∪		v
s	∩	∪	∩	∪		v
f	∩	∪	∩	∪		v
w	∩	∪	∩	∪		v
j	∩	∪	∩	∪		v
l	∩	∪	∩	∪		v
r	∩	∪	∩	∪		v
h						x



Inuktitut stop sign

