

Chapter 15

What is Writing?

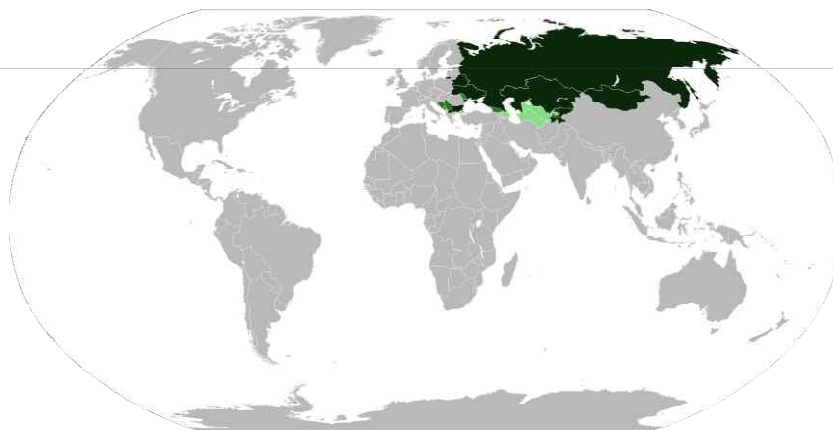
- ▶ Writing is “the use of graphic marks to represent specific linguistic utterances” (Rogers 2005:2)
- ▶ Writing is a system that is used to record language
- ▶ Writing depends on language, even though languages does not depend on writing
- ▶ Writing allows us to communicate with others beyond the capability of spoken language
- ▶ Language, and the writing that encodes it, allows us to communicate very specific ideas accurately and efficiently.
- ▶ Systematic structure is a vitally important aspect of writing: graphs/graphemes (elements of writing)
- ▶ Writing systmes are systematic ways of recording language by means of visual, permanent makrs
- ▶ Conventions
 - English: top to bottom, left to right
 - Arabic: top to bottom, right to left
 - Chinese: top to bottom in columns, right to left
 - Spacing, punctuation, capital letters

Writing and Language

- ▶ Writing is dependent on language by definition
- ▶ Writing is not language
 - Writing is not acquired in the way language is, but must be taught.
 - Spoken language encodes thought into a physically transmittable form, while writing encodes spoken language into a physically preservable form: writing is less changeable
- ▶ Writing systems are largely arbitrary
 - Serbian and Croatian are very closely related, but Serbian is typically written using the Cyrillic alphabet, and Croatian is typically written using the Roman alphabet
 - For Cherokee, an Iroquois language spoken in North Carolina and Oklahoma, Sequoyah developed a phonographic writing system in the 19C, making use of Roman letters as well as new characters of his own design. Syllabic. K [tso] [tʰo], J [ku] [kʰu]
 - The mapping convention between the spoken sound and the written graphemes must be learned explicitly for each language

Russian alphabet, Cyrillic

- ▶ The Cyrillic script /sɪˈrɪlɪk/ is an alphabetic writing system employed across Eastern Europe, North and Central Asian countries.
- ▶ It is based on the Early Cyrillic, which was developed in the First Bulgarian Empire during the 9th century AD at the Preslav Literary School.



- ▶ It is the basis of alphabets used in various languages, past and present, in parts of Southeastern Europe and Northern Eurasia, especially those of Slavic origin, and non-Slavic languages influenced by Russian.
- ▶ As of 2011, around 252 million people in Eurasia use it as the official alphabet for their national languages. About half of them are in Russia. Cyrillic is one of the most used writing systems in the world.

Russian alphabet, Cyrillic

- ▶ The Russian alphabet (Russian: русский алфавит, tr. rússkij alfavít; IPA: [ˈruskʲɪj ɐlfəˈvʲɪt]) uses letters from the Cyrillic script. The modern Russian alphabet consists of 33 letters.

А Б В Г Д Е
Ё Ж З И Й К
Л М Н О П Р
С Т У Ф Х Ц
Ч Ш Щ Ъ Ы Ь
Э Ю Я

➤ [Pronouncing
the Russian alphabet](#)

Sequoya's Syllabary for Cherokee

- ▶ 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.



Sequoyah

Sequoya's Syllabary for Cherokee

- ▶ In his system, each symbol represents a syllable rather than a single phoneme: the 85 (originally 86) characters in the Cherokee syllabary provide a suitable method to write Cherokee.
- ▶ Each of the characters represents one syllable, The first six characters represent isolated vowel syllables. Characters for combined consonant and vowel syllables then follow.

a	e	i	o	u	v [ə]
D a	R e	T i	Ꭰ o	Ꭱ u	Ꭲ v
Ꭶ ga Ꭷ ka	Ꭵ ge	Ꭶ gi	Ꭰ go	Ꭱ gu	Ꭲ gv
Ꭸ ha	Ꭶ he	Ꭸ hi	Ꭶ ho	Ꭱ hu	Ꭲ hv
Ꭰ la	Ꭶ le	Ꭶ li	Ꭰ lo	Ꭱ lu	Ꭲ lv
Ꭳ ma	Ꭰ me	Ꭱ mi	Ꭲ mo	Ꭳ mu	
Ꭴ na Ꭷ hna Ꭰ nah	Ꭴ ne	Ꭴ ni	Ꭴ no	Ꭴ nu	Ꭴ nv
Ꭵ qua	Ꭵ que	Ꭵ qui	Ꭵ quo	Ꭵ quu	Ꭵ quv
Ꭶ s Ꭰ sa	Ꭶ se	Ꭶ si	Ꭶ so	Ꭶ su	Ꭶ sv
Ꭷ da Ꭰ ta	Ꭷ de Ꭰ te	Ꭷ di Ꭱ ti	Ꭷ do	Ꭷ du	Ꭷ dv
Ꭸ dla Ꭰ tla	Ꭸ tle	Ꭸ tli	Ꭸ tlo	Ꭸ tlu	Ꭸ tlv
Ꭰ tsa	Ꭰ tse	Ꭰ tsi	Ꭰ tso	Ꭰ tsu	Ꭰ tsv
Ꭱ wa	Ꭱ we	Ꭱ wi	Ꭱ wo	Ꭱ wu	Ꭱ wv
Ꭲ ya	Ꭲ ye	Ꭲ yi	Ꭲ yo	Ꭲ yu	Ꭲ yv

- The charts show the syllabary as arranged by Samuel Worcester along with his commonly used transliterations.

Writing and Culture

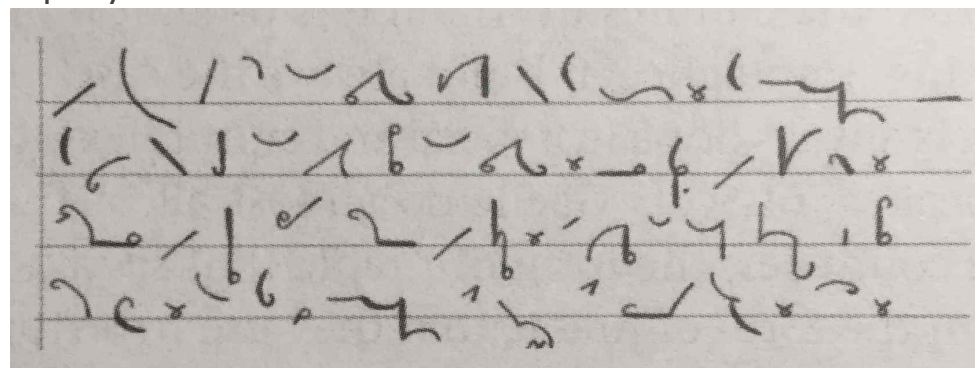
- ▶ Walter Ong, writing's negative impact on human mind

Writing, Plato has Socrates say in the *Phaedrus*, is inhuman, pretending to establish outside the mind what in reality can only be in the mind. It is a thing, a manufactured product. . . . Secondly, Plato's Socrates urges, writing destroys memory. Those who use writing will become forgetful, relying on an external resource for what they lack in internal resources. Writing weakens the mind. . . . Thirdly, a written text is basically unresponsive. If you ask a person to explain his or her statement, you can get an explanation; if you ask a text, you get back nothing except the same, often stupid, words which called for your question in the first place. (1982:79)

- ▶ “one of the most significant cultural accomplishments of human beings” (Rogers 2005:1)
- ▶ Culture influences writing
 - ▶ In north-western Scotland, speakers of Scots Gaelic do almost all of their writing in English
 - ▶ In many Arabic-speaking countries, the form of Arabic that speakers use in spoken language is quite different from the form of Arabic that they use in writing
 - ▶ Writing is a separate dialect?

Functional Writing Systems

- ▶ Writing systems can function as dialects or identity markers
- ▶ Orthographies:
- ▶ Pedographies : stepping stone to the standard orthography.
Language learners
- ▶ Technographies: scientific tools. e.g. IPA, chemical notation, computer coding, cartography
- ▶ Shorthands:
- ▶ Cryptographies, codes:
diplomatic, military ,
industrial communication




(1) The Lord's Prayer in Pitman's Shorthand


Computer-Mediated Communication

- ▶ books, letters
- ▶ Digital communication: email, texting, online chats, blogs, social media
- ▶ Asynchronous: not conducted in real time
- ▶ Synchronous: conducted simultaneously
- ▶ David Crystal: Although online communication is closer to writing, it “selectively and adaptively displays properties of both” writing and speech (2006:51)
- ▶ Abbreviations (brb, lol), emoticons (ideographs)
- ▶ Are developments in CMC leading to permanent changes in written language?


Types of Writing Systems (File 15.2)

- (1) Visualizing the relationship between the spoken language and its writing system

a. English			
Linguistic Sign =	Form	+	Meaning
Spoken word =	[baks]	+	
Written word =	<i>box</i>		

b. Mandarin Chinese			
Linguistic Sign =	Form	+	Meaning
Spoken word =	[xɤ ³⁵] ⁽ⁱ⁾	+	
Written word =	盒		

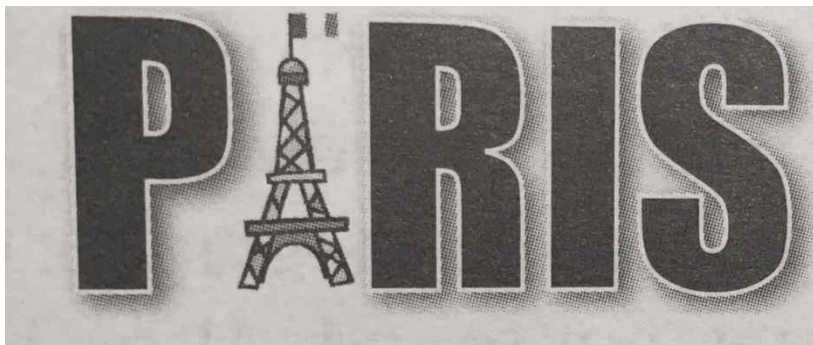
c. Cantonese Chinese

Linguistic Sign =	Form	+	Meaning
Spoken word =	[neu ⁵⁵]	+	'angry'
Written word =			

----> indicates the written form's approximation of form and/or meaning.

(i) The numbers after the segments are Chao-type tone numbers, with '5' denoting the highest pitch in the pitch range, and '1' the lowest (see Section 2.5.4).

(2) Example of symbols of representing both sound and meaning in English



Three Basic Strategies of Writing Systems

- ▶ Logogram (Morphographic Writing System)
 - A character/sign for each word
 - Sumerian cuneiform, Mayan glyphs, Egyptian hieroglyphs, Chinese, Kanji
- ▶ Syllabary (Phonographic Writing System)
 - A sign for each syllable (CV)
 - Linear B of Mycenaean Greece, Kana, Cherokee
- ▶ Alphabet (Phonographic Writing System)
 - A letter for each basic sound (a phoneme)
 - Roman, Greek, Russian, Ethiopian alphabet, Han'gul, Irish Ogham

Morphographic Writing Systems

▶ 2, &, % cf. l& for land?

(3) Chinese morphographs

a. 與 狼 共 舞
with wolf(s) together dance 'Dancing with Wolves'

(The Chinese translation of a movie name)

b. 發 展
expand extend 'to develop'

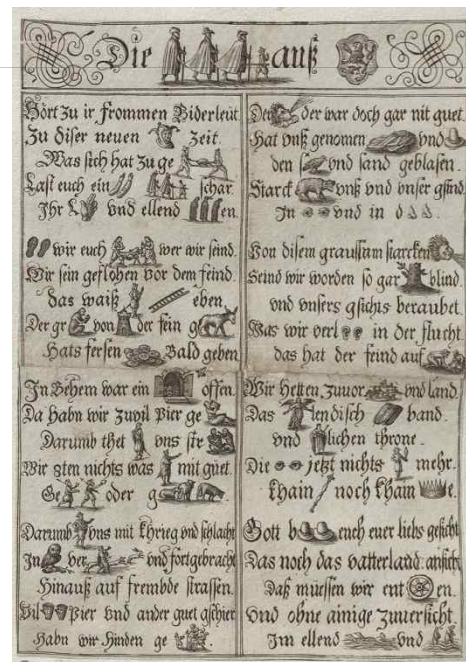
(A longer word in Chinese)

▶ As morphographic writing systems develop, a very large proportion of the morphographs come to represent the sound, as well as the meaning, of the words

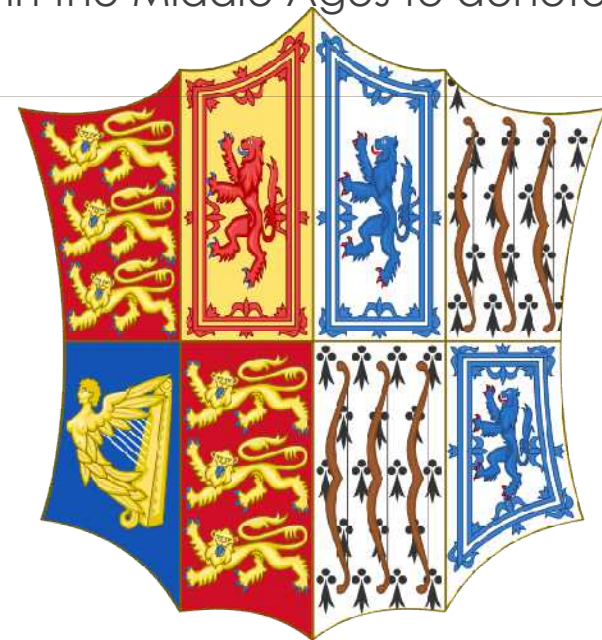
(4) Examples of morphographs in early Chinese: 'above' is on the left;
'below' is on the right.

Rebus

- ▶ A **rebus** is an allusional device that uses pictures to represent words or parts of words.
- ▶ It was a favorite form of heraldic expression used in the Middle Ages to denote surnames.



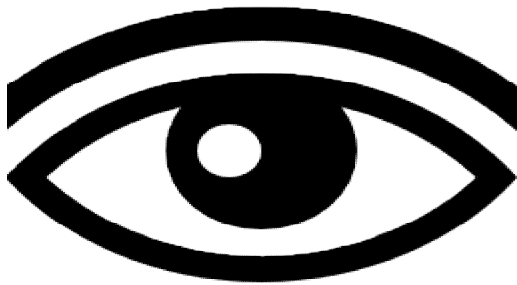
Hye-Won Choi A German rebus, circa 1620.



The arms of Elizabeth Bowes-Lyon: bows and lions.

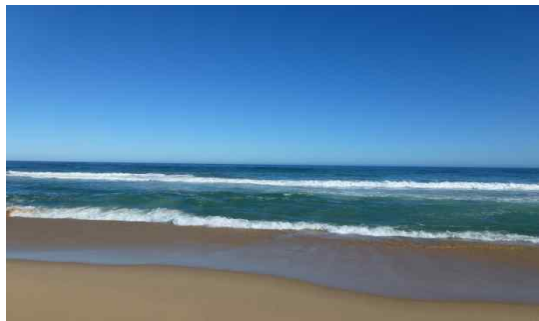
Rebus principle

- ▶ **The rebus principle** means using existing symbols, such as pictograms, purely for their sounds regardless of their meaning, to represent new words.
- ▶ Many ancient writing systems used the rebus principle to represent abstract words, which otherwise would be hard to be represented by pictograms.
- ▶ An example that illustrates the Rebus principle is the representation of the sentence "I see you" by using the pictographs of "eye—sea—ewe."

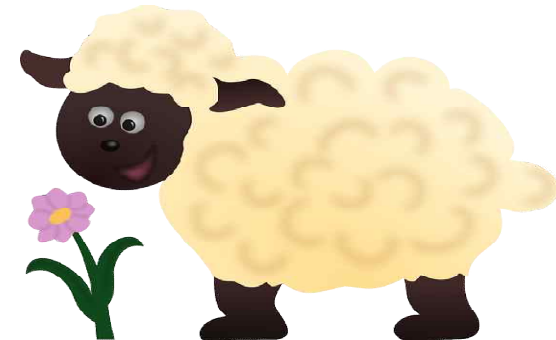


eye

Hye-Won Choi



sea



ewe

Rebus

- Three rebus-style "escort cards" from the 1860s or 1870s.



(6) (File 15.2.2, p.600)

Meaning Component	Phonetic Component	Written Form and Pronunciation	Word Meaning 18
木 'wood'	+ 來 [lai ³⁵]	→ 栳 [lai ³⁵]	'large-leaved dogwood'
金 'gold'	+ 來 [lai ³⁵]	→ 銖 [lai ³⁵]	'rhenium'
山 'mountain'	+ 來 [lai ³⁵]	→ 嶺 [lai ³⁵]	'Qionglai' (name of a mountain)
水 'water'	+ 來 [lai ³⁵]	→ 涑 [lai ³⁵]	'Laishui' (name of a river in the north of China)
目 'eye'	+ 來 [lai ³⁵]	→ 眊 [lai ³⁵]	'to squint'

Meaning Component	Phonetic Component	Written Form and Pronunciation	Word Meaning
口 'mouth'	+ 馬 [ma ²¹⁴]	→ 嗎 [ma ⁰]	Question particle
口 'mouth'	+ 馬 [ma ²¹⁴]	→ 罵 [ma ⁵¹]	'to scold'
女 'woman'	+ 馬 [ma ²¹⁴]	→ 媽 [ma ⁵⁵]	'mother'
虫 'insect'	+ 馬 [ma ²¹⁴]	→ 螞 [ma ²¹⁴]	'ant/leech/locust'
玉 'jade'	+ 馬 [ma ²¹⁴]	→ 瑪 [ma ²¹⁴]	'agate'

Phonographic Writing Systems: Syllabic Writing Systems

(7) Examples of some of the corresponding syllables in hiragana and katakana

Hiragana	Katakana
だ ぢ づ で ど [da] [dʒi] [dzu] [de] [do]	ダ チ ツ デ ド [da] [dʒi] [dzu] [de] [do]
わ [wa]	ワ [wa]
を ん [wo] [n] ⁴	ヲ ヲ ン [wo] [n]

(8) The word 'telephone' written in Japanese using Hiragana, katakana, and kanji

Hiragana	Katakana	Kanji
でんわ [den wa]	デンワ [den wa]	電話 [den wa]

Phonographic Writing Systems:

Abugida

- Abugidas: systems that represent the consonants with full graphemes and the vowels with extra marks (diacritics) on the consonants
- Devanagari (Sanskrit, Hindi, Marathi, Nepali); Gujarati (Gujarati, Kacchi); Bengali (Assamese, Bengali) ← ancient Brahmi script

(9) Syllables in Devanāgarī starting with [k]

क	का	को	कि	की	के	कु	कू	कौ	कै	कृ
[ka]	[kaː]	[ko]	[ki]	[kiː]	[ke]	[ku]	[kuː]	[kaw]	[kai]	[kr̥]

(10) Initial vowel symbols in Devanāgarī

अ	आ	इ	ई	उ	ऊ	ए	ओ
[a]	[aː]	[i]	[iː]	[u]	[uː]	[e]	[o]

In (11), you can see how a Devanāgarī word is built up from various symbols. Devanāgarī is (mostly) written from left to right.

(11) Writing the word [gadʒena] 'elephant' in Devanāgarī

ग	जे	न	गजेन
[ga]	[dʒe]	[na]	[gadʒena]

Phonographic Writing Systems:

Abjads

- Abjads: systems that represent only the consonants but not the vowels
 - Arabic, Hebrew
 - cf. This sentence is written with the vowel symbols left out
- (12) Some Hebrew words

Hebrew Orthography and Letter-by-Letter IPA	Full IPA Transcription of the Pronunciation	English Gloss
גמל lmg	[gamal]	'camel'
מברשת tʃɣvm	[mivɤʃet]	'brush'
סלם mls	[sulam]	'ladder'
מדפסת tʃpdm	[madpeset]	'printer'

(13) The word 'ladder' in Hebrew containing vowel diacritics

ס ל ם
m_al_us

[sulam] 'ladder'

Phonographic Writing Systems: Alphabets

- Alphabets: systems that represent all of the phonemes (consonants, vowels) used in the spoken language
- Roman (Latin) alphabet (English, Swahili, Finnish, Turkish, Polish, Czech) ← Greek alphabet
- Cyrillic alphabet (Russian, Serbian, Bulgarian, Ukrainian; Moldovan, Uzbek) ← Greek alphabet

(14) The Cyrillic alphabet used for Russian (both capital and lowercase letters are given)

Аа	[a]	Кк	[k]	Хх	[x]
Бб	[b]	Лл	[l]	Цц	[ts]
Вв	[v]	Мм	[m]	Чч	[tʃ]
Гг	[g]	Нн	[n]	Шш	[ʃ]
Дд	[d]	Оо	[o]	Щщ	[ʃʲ]
Ее	[je]	Пп	[p]	Ъъ	'hard sign'
Ёё	[jo]	Рр	[r]	Ыы	[ɨ]
Жж	[ʒ]	Сс	[s]	Ьь	'soft sign'
Зз	[z]	Тт	[t]	Ээ	[ɛ]
Ии	[i]	Уу	[u]	Юю	[ju]
Йй	[j]	Фф	[f]	Яя	[ja]

Phonographic Writing Systems: Alphabets

- “hard sign”, “soft sign”: no pronunciation of their own; indicate something about the preceding consonant
- “soft sign”: the preceding consonant is unpredictably palatalized
- “hard sign”: a consonant is not palatalized in a context where you might expect it to be

(15) Examples of Russian orthography

	Russian Orthography	Phonemic IPA Transcription	English Gloss
No palatalization	до <u>ма</u>	/doma/	‘at home’
	луч <u>ше</u>	/lutʃʃe/	‘better, rather’
Palatalization marked on the consonant (with the soft sign)	се <u>мь</u>	/sʲemʲ/	‘seven’
	бо <u>ль</u> ше	/bolʲʃe/	‘more’
Palatalization marked on the vowel (using a special vowel symbol)	се <u>мя</u>	/sʲemʲa/	‘seed’
	лю <u>б</u> овь	/lʲubovʲ/	‘love’
Palatalization marked on both the consonant and the vowel	се <u>м</u> я	/sʲemʲja/	‘family’
	ко <u>л</u> е	/kolʲje/	‘necklace’

First Writing Systems

- ▶ Sumerian Cuneiform
 - logograms, phonetic signs, determinatives
- ▶ Mesoamerican Native American writing
 - logogram, phonetic signs (syllabaries)
- ▶ Universality of human creativity
 - While Sumerian and Mesoamerican languages bear no special relation to each other among the world's languages, both raised similar basic issues in reducing them to writing.

Fertile crescent

- ▶ Writing has its origins in the strip of fertile land stretching from the Nile up into the area often referred to as the Fertile Crescent.
- ▶ This name was given, in the early 20th century, to the inverted U-shape of territory that stretches up the east Mediterranean coast and then curves east through northern Syria and down the Euphrates and the Tigris to the Persian Gulf.

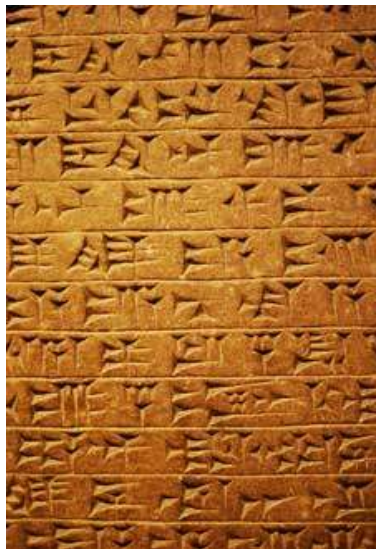


MAP 1.2 The Fertile Crescent

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Fertile crescent

- ▶ Writing is believed to have first evolved around 5,000 years ago, in a region of the **Fertile Crescent** called Sumer.
- ▶ An elaborate system of symbols known as cuneiform was developed to permanently record official accounts on clay tablets — but it didn't take long for cuneiform to be used for political and historical events as well — even legends, such as the fabled story of Gilgamesh, the oldest written story in the world.



- General translate cuneiform into English

Sumerian cuneiform

- ▶ Sumerian was spoken in Sumer in southern Mesopotamia (part of modern Iraq) from perhaps the 4th millennium BC until about 2,000 BC.
- ▶ Sumerian is not related to any other known language so is classified as a language isolate.



Sumerian cuneiform tablet, listing herders and cows in the goddess Inana's fields, 21st–20th century B.C.

- ▶ Sumerian cuneiform is the earliest known writing system. Its origins can be traced back to about 8,000 BC and it developed from the pictographs and other symbols used to represent trade goods and livestock on clay tablets.



- The name 'cuneiform' means 'wedge-shaped' and comes from the Latin *cuneus* (wedge).
- It is based on the appearance of the strokes, which were made by pressing a reed stylus into clay. These type of symbol emerged in 3,000 BC.

3000 BC	2800 BC	2500 BC	1800 BC	600 BC	
					an (god, heaven)
					ki (earth)
					lu (man)
					sal (woman/female)
					kur (mountain, land)
					geme (female slave)
					sag (head)
					ka (mouth)
					ninda (bread)

Mesoamerica

- ▶ Mesoamerica, along with Mesopotamia and probably China, is one of the few places in the world where writing has developed independently.
- ▶ Five or six scripts have been documented in Mesoamerica, and the best documented and deciphered Mesoamerican writing system, and the most widely known, is the classic Mayan script.





































Mesoamerica

30

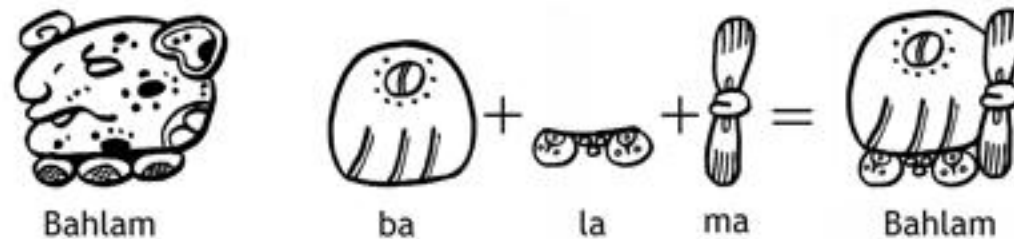
- ▶ The most distinguishable feature of all Mesoamerican scripts is the highly intricate and pictorial form of signs. They are often called "hieroglyphic" in analogy to Egyptian hieroglyphs since their symbols are highly pictorial.

- ▶ Visually, Mesoamerican scripts resemble each other, and share many similar glyphs. This is primarily due to the fact that many Mesoamerican glyphs bear resemblance to real objects such as animals, people, natural features, etc, albeit in a stylized fashion.

	Maya	Zapotec	epl-Olmec	Aztec	Mixtec
snake					
jaguar					
hill					
moon					
human/deity head					
hand compound					
quadrupartite shape					

Mayan glyphs

- ▶ Mayan glyphs is the writing system of the Maya civilization of Mesoamerica, presently the only Mesoamerican writing system that has been substantially deciphered.
- ▶ The Mayan script was a logosyllabic system. Individual symbols ("glyphs") could represent either a word (actually a morpheme) or a syllable; indeed, the same glyph could often be used for both.
- ▶ Maya writing combined logographs (symbols representing whole words) with symbols that represented phonetic syllables (for example: ma, me, mi, mo, mu).





















Mayan glyphs

- ▶ In syllabic writing, the symbols representing consonant/vowel pairs or vowels were arranged in glyph blocks to sound out each word. In each glyph block the symbols were generally read from top to bottom and from left to right.
- ▶ In short inscriptions the glyph blocks were arranged horizontally or vertically in single line sentences. In longer texts the glyph blocks were often placed into a grid much like a chessboard. The glyph blocks were then read from top to bottom and left to right in paired columns.









The Historical Evolution of Writing Systems

(1) Comparison of some pictograms

	Sumerian	Egyptian	Chinese
'man'			
'ox'			
'star'			
'sun'			
'water'			
'road'			

The Historical Evolution of Writing Systems

(2) Semantic extension of some Egyptian hieroglyphs

	Original Significance	Extension
	'knife'	'to cut, slay'
	'fire'	'to cook, burn'
	'sail'	'wind, air'
	'man with arms down'	'submission'
	'man with arms raised'	'to pray, praise'
	'men grasping hands'	'friendship'

The Historical Evolution of Writing Systems

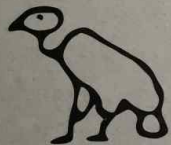
(3) Sound associations of some Egyptian hieroglyphs



[peh]



[anx]



[mut]



[ma:t]



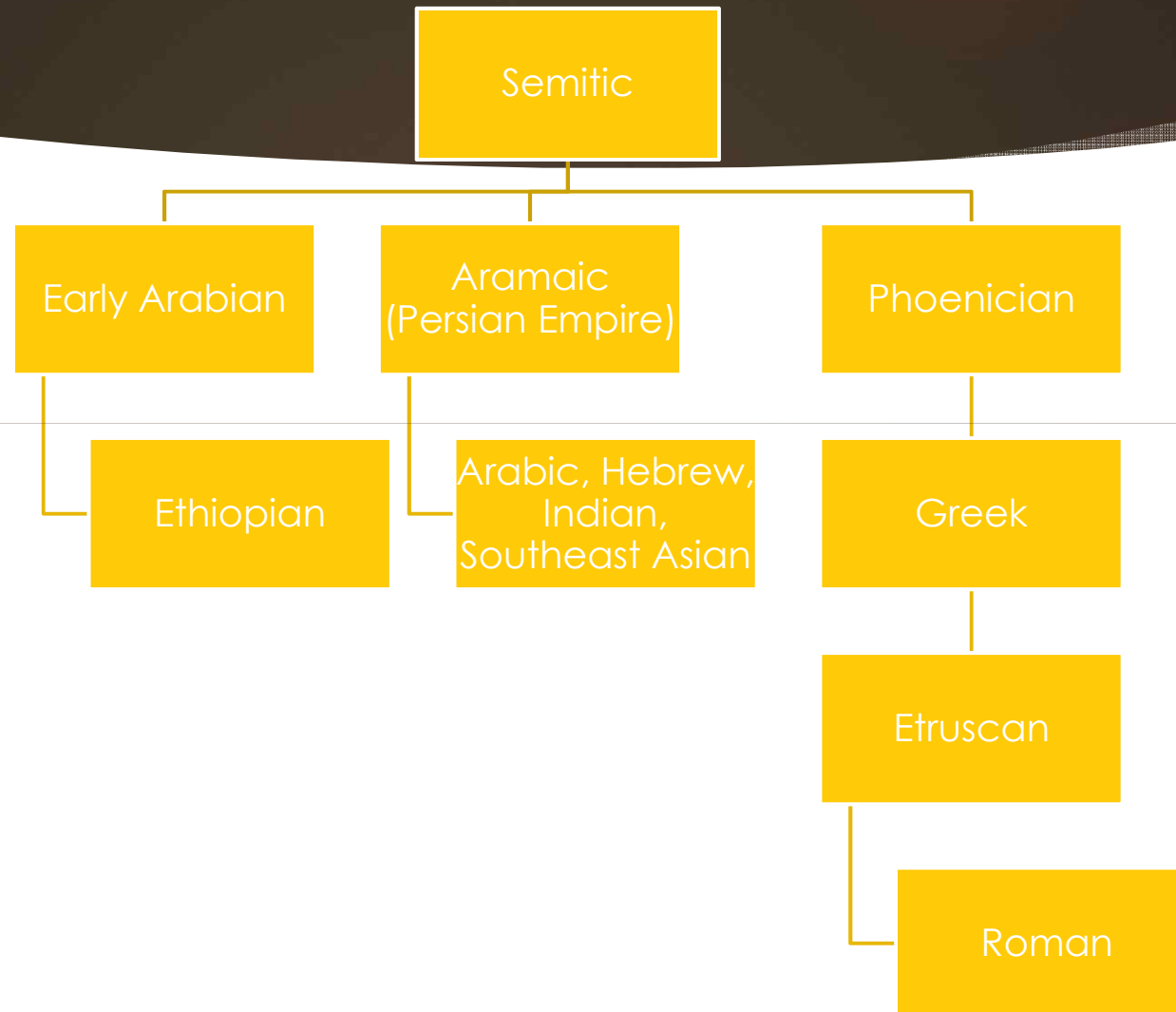
[xeper]

(4) Egyptian symbol for *owl* [mulok]




Developments of Alphabets

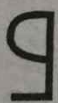
36



The Development of the Greek and Roman Alphabets (and other writing systems)

(5) Semitic symbols for (a) 'ox' [ʔalef] and (b) 'house' [bet]

a. 

b. 

The Development of the Greek and Roman Alphabets (and other writing systems)

(6) The Greek alphabet

Greek Letters (Capital, Lowercase)			Greek Letters (Capital, Lowercase)		
	IPA Value	Greek Pronunciation of Letter Name		IPA Value	Greek Pronunciation of Letter Name
A α	[a]	[alfa]	N ν	[n]	[ni]
B β	[v]	[vita]	Ξ ξ	[ks]	[ksi]
Γ γ	[ɣ]	[ɣjama]	Ο ο	[o]	[omikran]
Δ δ	[ð]	[ðelta]	Π π	[p]	[pi]
Ε ε	[ɛ]	[epsilan]	Ρ ρ	[r]	[ro]
Ζ ζ	[z]	[zita]	Σ σ ς	[s]	[siyma]
Η η	[i]	[ita]	Τ τ	[t]	[taf]
Θ θ	[θ]	[θita]	Υ υ	[i]	[ipsilan]
Ι ι	[i]	[arota]	Φ φ	[f]	[fi]
Κ κ	[k]	[kapa]	Χ χ	[x]	[çi]
Λ λ	[l]	[lamða]	Ψ ψ	[ps]	[psi]
Μ μ	[m]	[mi]	Ω ω	[o]	[omeya]