Writing Systems

The first thing to point out about writing systems is that they are not universal, unlike a lot of the things we are talking about.

Writing is a *technology*, something discovered by some groups of people but not others. There's no similar variation in 'language' per se; we don't find groups of people who don't have language, but there are plenty of groups of people without writing (or numbers, to pick another example).

Once somebody discovers writing, of course, the idea tends to spread quickly…

Writing systems are partly shaped by the media that they're typically used with…

Ogham: writing system found mainly in Ireland, maybe starting around the first century AD.
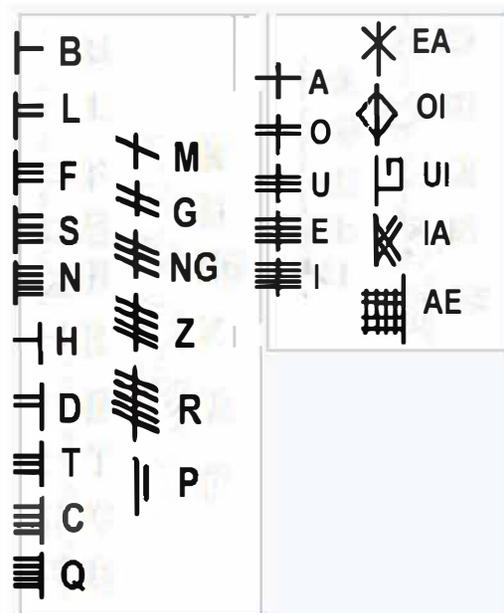
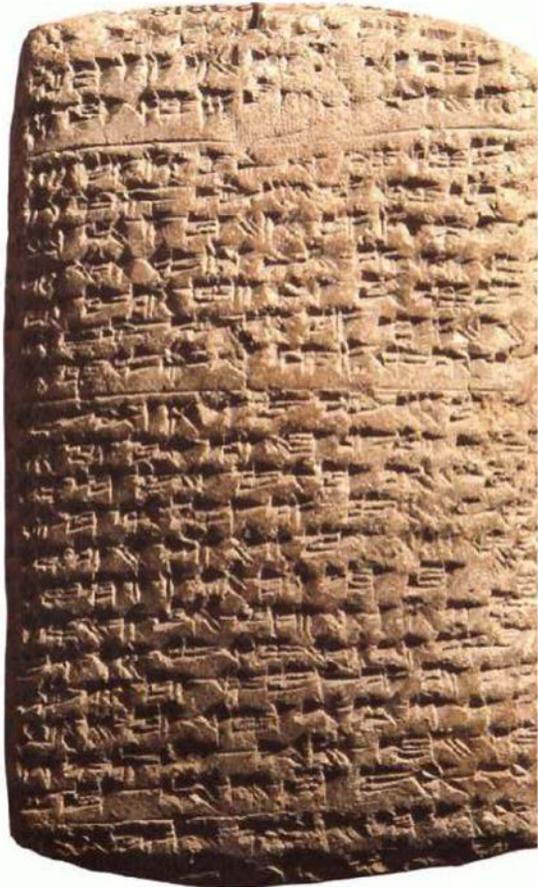Designed for etching on stones.

Writing systems are partly shaped by the media that they're typically used with…

This image is in the public domain.

Futhark: old North Germanic writing system, dating back to 2nd century AD: again, mostly scratched on stone, wood, metal.

Writing systems are partly shaped by the media that they're typically used with…

*Cuneiform*: made with reed tip on clay: starting 30 centuries BC.

This image is in the public domain.

Writing systems are often classified by the amount of information included in each symbol:

- **Logographic**: each symbol approximates a 'word'
- **Syllabary**: each symbol approximates a 'syllable'
- **Abugida**: (not unlike a syllabary…)
- **Alphabet**: each symbol approximates a 'phoneme'

Logographic:
earliest cuneiform, Egyptian hieroglyphs, Mayan inscriptions…
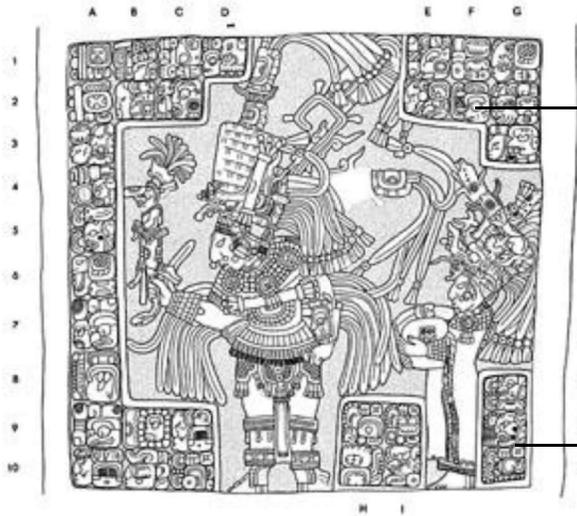
'It is her image in the act of public performance, Lady First ?-House Snake, Prophetess ?-person, Lady Great Skull.'

'She is the mother of Shield Jaguar IV, the ?-Lord'

Logographic:
     …and Chinese characters.

馬   mǎ 'horse'

女   nǚ 'woman'

Logographic:

...and Chinese characters.

馬　　măˇ 'horse'

女　　nǚ 'woman'

媽

　　　mā 'mother'　　（'character referring to a woman, which
　　　　　　　　　　　　　 sounds sort of like "horse"'）

Logographic:

Don't exactly refer to 'words'…

選　　xuǎn　'choose'

手　　shǒu　'hand'

Logographic:

Don't exactly refer to 'words'…

選　xuǎn　'choose'

手　shǒu　'hand'

選手　xuǎnshǒu　'athlete, player on an athletic team'

Logographic:

one advantage: they're very useful for distinguishing homonyms!

shí shì shī shì shī shì, shì shī, shì shí shí shī.

Logographic:

one advantage: they're very useful for distinguishing homonyms!

shí shì shī shì shī shì, shì shī, shì shí shí shī.
'A poet named Shi lived in a stone house and liked to eat lion flesh, and he vowed to eat ten of them'

shí	shì	shī	shì	shī	shì	shì	shī	shì	shí	shí	shī
石	室	詩	士	施	氏,	嗜	獅,	誓	食	十	獅。
stone	room	poet	Shi	give	name	like	lion	vow	eat	ten	lion

Syllabaries

each symbol stands for a 'syllable', typically a CV sequence.

	Linear B	*Cherokee*	*Japanese hiragana*
ma	ᛘᚫ (ma)	Ꮉ	ま
me	(me)	Ꮊ	め
mi	(mi)	Ꮋ	み
mo	(mo)	Ꮌ	も
mu	(mu)	Ꮍ	む

Syllabaries

Common for logographic systems to be supplemented by syllabaries:

選　　　　　xuǎn　'choose'　　　　　[*Mandarin*]

選ぶ　　　　era.bu　'choose, will choose' [*Japanese*]

選んだ　　era.nda 'chose'

選ばない　　era.banai　'won't choose'

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選　　　　　xuǎn　'choose'　　　　　[*Mandarin*]

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選んだ　　era.nda 'chose'

選ばない　　era.banai　'won't choose'

選手　　　　senshu　　'athlete'

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Syllabaries

Japanese *hayai* 'early, fast'…

Syllabaries

早　　zǎo 'early'

速　　sù 'fast'

Syllabaries

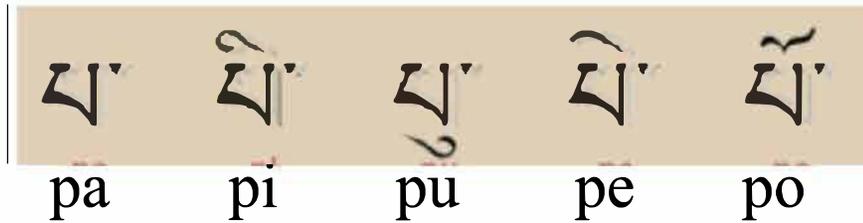早　　zǎo 'early'

速　　sù 'fast'

早い　　haya.i 'early'　　(早朝 **sou**chou 'early morning')

速い　　haya.i 'fast'　　(速度 **soku**do 'speed')

Abugida

Sort of like a cross between a syllabary and an alphabet…

Tibetan

pa   pi   pu   pe   po

Devanagari

Tagalog baybayin

Abugida

Cree syllabics

(developed by James Evans in the 1830's, originally for Ojibwe; now used in Cree, Inuktitut)

◁ a	▽ e	△ i	▷ o	‖ h	· w
< pa	∨ pe	∧ pi	> po	ˈ p	⚬ ow
⊂ ta	∪ te	∩ ti	⊃ to	∕ t	
b ka	۹ ke	P ki	d ko	╲ k	
∪ cha	∩ che	⌒ chi	⌣ cho	— ch	
∟ ma	⌐ me	Γ mi	⌐ mo	ᑕ m	
ᓇ na	ᓀ ne	σ ni	ᓄ no	ᒉ n	
ᔅ sa	ᔦ se	ᔨ si	ᔧ so	ᓐ s	
ᔾ ya	ᕀ ye	ᐞ yi	ᕝ yo	+ y	

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Alphabets

Symbols represent (more or less) phonemes.

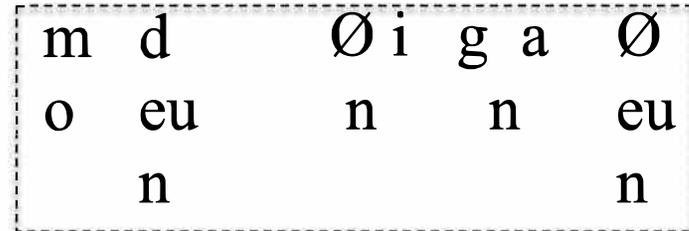*Roman*   all people

Cyrillic   все люди
             vse ljudi

Mkhreduli ყველა ადამიანი
             qvela   adamiani

Hebrew   כל בני
             ynb lk   → kol benei

Hangeul   모든 인간은 - - - - - →

m	d		Ø i	g	a	Ø
o	eu		n		n	eu
	n					n

             modeun ingan-eun

Direction of writing

left-to-right?

right-to-left?

top-to-bottom?

boustrophedon?
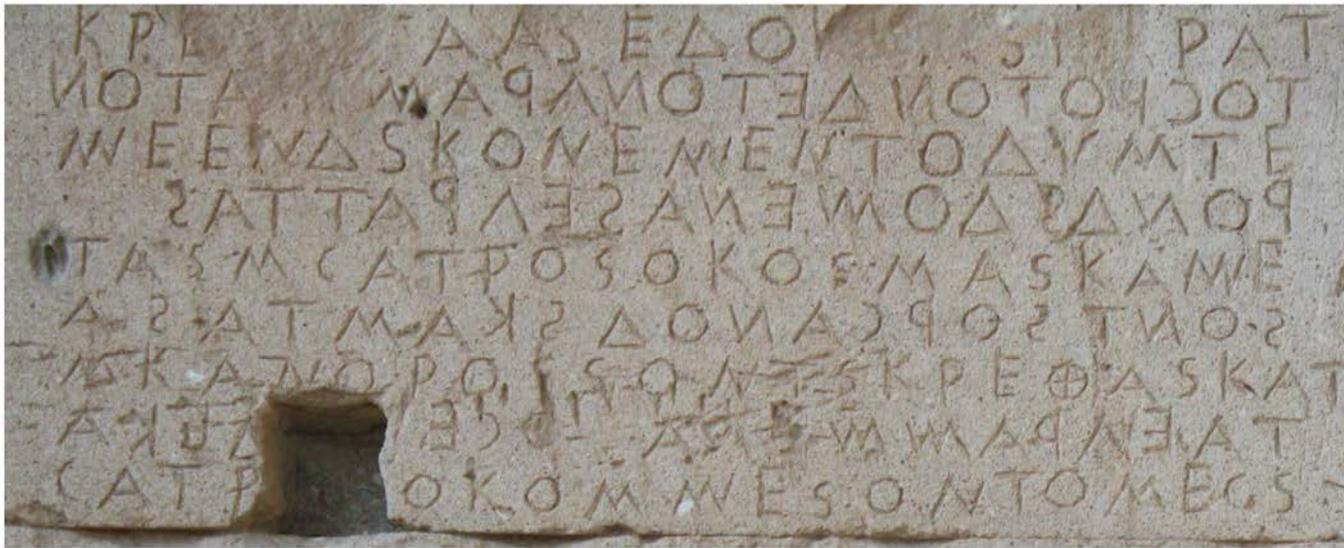
What information is represented?

- regular phonology?

s**t**op	/t/
top	/t^h/
La**t**in	/t$^{\textipa{P}}$/
ca**t**erpillar	/ɾ/

What information is represented?

- regular phonology?

s**t**op	/t/
top	/tʰ/
La**t**in	/tˀ/
ca**t**erpillar	/ɾ/

German	Han**d**	/t/	'hand'
	Hän**d**e	/d/	'hands'
Turkish	ta**t**	/t/	'taste'
	ta**d**ı	/d/	'his/her taste'

What information is represented?

- regular phonology?
- vowels?

abjad:

Hebrew　　כל　בני

　　　　　ynb　lk　　→ kol benei 'all people'

What information is represented?

- regular phonology?
- vowels?
- ends of syllables?

Linear B

a　mi　ni　so　　　→ *Amnisos* (place name)

What information is represented?

- regular phonology?
- vowels?
- ends of syllables?
- tone?

    Tibetan   པ   ཕ   བ

                     pá   pʰá   pʰà

What information is represented?

- regular phonology?
- vowels?
- ends of syllables?
- tone?

Tibetan   པ   ཕ   བ

pá   pʰá   pʰà

ལ

là

What information is represented?

- regular phonology?
- vowels?
- ends of syllables?
- tone?

Tibetan པ   ཕ   བ

pá   pʰá   pʰà

ལ   བླ   གླ   ('bla', 'gla')

là   lá   lá

What information is represented?

- regular phonology?
- vowels?
- ends of syllables?
- tone?

Hmong (Romanized Popular Alphabet)

pó   **pob**   (High)
pō   **po**   (Mid)
pò   **pos**   (Low)
pô   **poj**   (High Falling)
pǒ   **pov**   (Mid Rising)
po̰   **pom**   (Creaky)
po̤   **pog**   (Low Falling Breathy)

What information is represented?

- regular phonology?
- vowels?
- ends of syllables?
- tone?
- syllable boundaries, word boundaries, sentence boundaries…

Tibetan

བོད་སྐད་

bod   skad
Tibet language
'Tibetan'

Writing systems are often conservative…

Tibetan

བོད་སྐད་

bod skad   /pʰòʔ kɛ́ʔ/
Tibet language
'Tibetan'

Writing systems are often conservative…

Tibetan   བོད་སྐད་

  bod skad   /pʰö̀ʔ kɛ́ʔ/
  Tibet language
  'Tibetan'

English   knight (< OE cniht 'boy')…

Writing systems are often conservative…

but on the bright side:

photograph

photography

Writing systems are often conservative…

but on the bright side:

photograph   foɾəgræf

photography   fət^hɑgrəfi

Writing systems are often conservative…

but on the bright side:

photograph   foɹəgɹæf   (British fotəgɹɑf)

photography   fət^{h}ɑgɹəfi