

The History of the Alphabet

INTRODUCTION: Pre-Alphabetic Writing

- the **alphabet** is everywhere you look in modern Western life
 - which makes it hard to remember that it was once invented by someone somewhere
 - but it's not even as organic as counting in tens
- writing in the West began with cuneiform and hieroglyphic pictographs
 - better, **ideograms**
 - cf. modern ideograms: \$, &, £, ®
- what happened to ideographic writing?

The History of the Alphabet

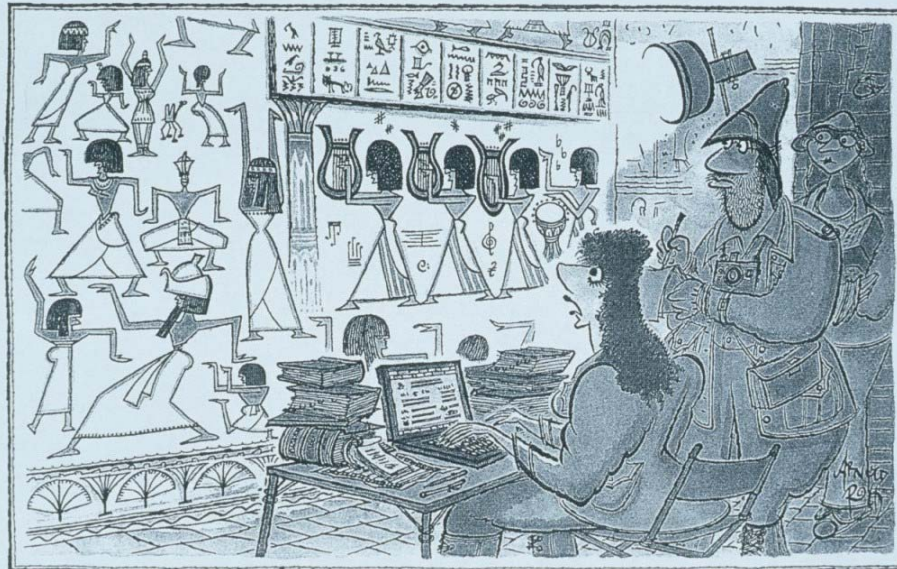
INTRODUCTION: Pre-Alphabetic Writing

- Chinese writing is based on ideograms
 - hard to learn at first, so it takes Chinese students much longer to learn how to write than Western students
 - they're essentially learning a new language, since writing is not based on spoken Chinese
- but our alphabetic system is also at times a "new language"
 - especially when spelling is unrelated to spoken English, e.g. knight

The History of the Alphabet

INTRODUCTION: Pre-Alphabetic Writing

- theme of this “capstone” lecture: why and how did the alphabet develop?
 - where did it originate and who invented it?
 - can modern alphabetic writing be fixed?



It does say, "Rock 'n Roll will live forever."

The History of the Alphabet

Egyptian Hieroglyphics

- data suggest that the modern alphabet can be traced back, at least in part, to Egyptian **hieroglyphics**
 - because of a similarity in letter shapes between some hieroglyphs and early alphabetic signs



The History of the Alphabet

Egyptian Hieroglyphics

























- translator of hieroglyphics: **Jean François Champollion**, 1822
 - used names to decipher hieroglyphic symbols
 - worked on the assumption that at least some of the symbols were **phonetic**
 - i.e. hieroglyphs were a mix of ideograms and phonetic signs
 - his work revealed the history of Egypt and writing!



The History of the Alphabet

Egyptian Hieroglyphics

- Mesopotamian cuneiform texts predates Egyptian hieroglyphic writing
 - but not by much, and so most scholars assume hieroglyphs were created independently
 - from early on, hieroglyphic signs included alphabetic symbols for consonants
 - which early cuneiform did not!









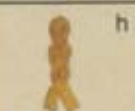







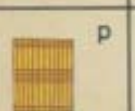
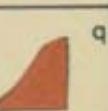


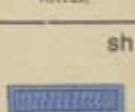
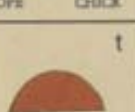
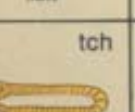
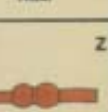
	= A		= L or R
	= B		= M
	= B		= N
	= E		= P
	= I	 ,  , 	= R
	= I		= S
	= I		= S
	= U or O		= S
	= K		= T
	= K		= T
	= K		= T

The History of the Alphabet

Egyptian Hieroglyphics

- it also included a **syllabic script**
 - different signs for various syllables, e.g. ba, be, bi, bo, bu, etc.
 - many of these letter signs are **mnemonic devices**
 - e.g. /r/: shaped like a mouth
 - Eg. word for “mouth”: *r* [r't]

THE HIEROGLYPHIC ALPHABET

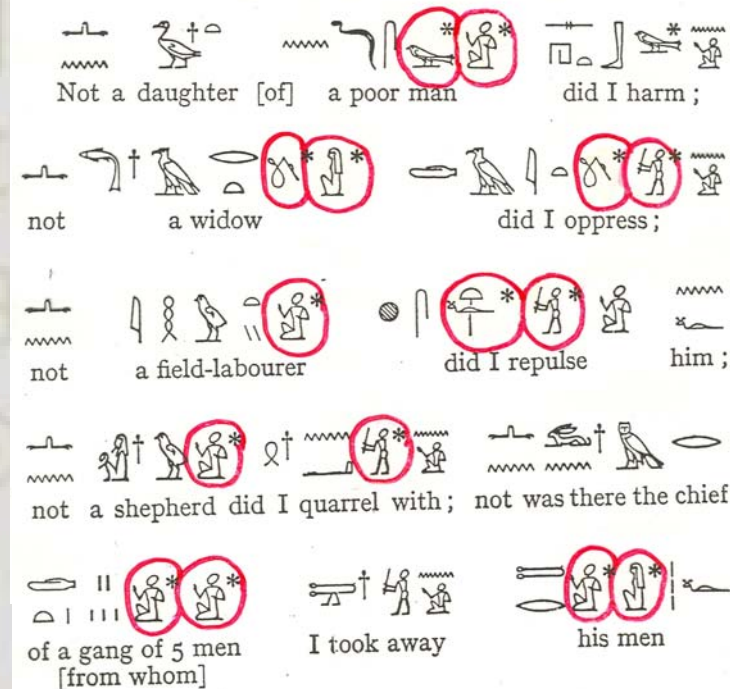
 VULTURE a	 ARM a	 FOOT b	 PLACENTA kh	 HAND d	 HORNED VIPER t
 POT STAND g	 COURTYARD h	 CANDLEWICK h	 REED LEAF i y	 COBRA dj	 BASKET k
 LION l	 OWL m	 WATER n	 KNOTTED ROPE o	 QUAIL CHICK w	 MAT p
 MOUTH r	 FOLDED CLOTH s	 POOL sh	 LOAF t	 ROPE tch	 DOOR BOLT z

The History of the Alphabet

Egyptian Hieroglyphics

- but only consonants were written
 - leaving vowels out makes sense in Semitic languages where the meaning of a word is defined by its consonants
 - ideographic **determinatives** were added to clarify the meaning of a word
 - this made reading/writing hieroglyphics harder
 - but Egyptian scribes wanted that, because it kept them in business!

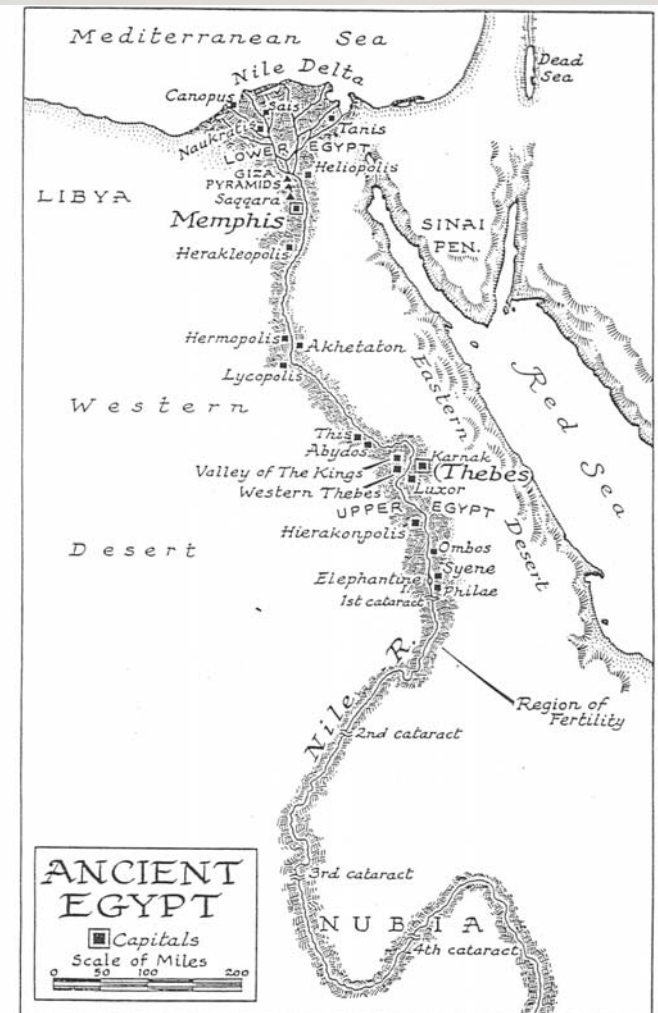
In the following passage from an inscription at Bani Hasan the determinatives are marked with * and the syllables with † :—



The History of the Alphabet

The Invention and Spread of the Alphabet

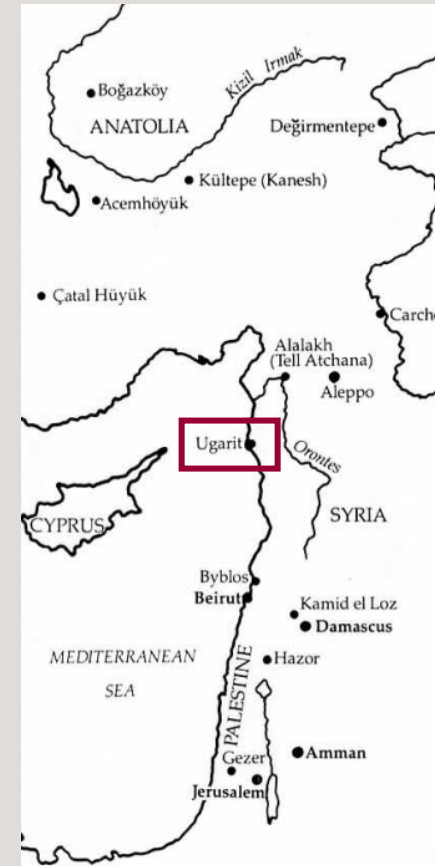
- to become more democratic, writing would have to leave Egypt
 - like Moses and the Hebrews of the Exodus!
- first known use of the alphabet: in the turquoise mines of the Sinai
 - by early **Semitic** speakers
 - related to **Hebrew/Arabic**
 - included **gutturals**



The History of the Alphabet

The Invention and Spread of the Alphabet










- but while this hieroglyphics-based alphabet is the earliest known, it's not the only early alphabet attested, e.g. from **Ugarit**
 - this **cuneiform alphabet** used cuneiform characters
 - it's clearly an attempt to borrow the idea of alphabetic writing from its hieroglyphics-friendly inventor/s but in a form of writing more familiar to those in the Near East
 - in the long run, it went nowhere



The History of the Alphabet

The Phoenician Alphabet

- from Egypt, the alphabet was passed to **Phoenicia** (eastern Mediterranean seaboard)
 - letter names: *‘aleph, beth, gimel,*
 - from this come the Greek names *alpha, beta, gamma, delta, ktl.*
 - hence, our word “alphabet”
 - n.b. these names have significance in Phoenician
 - mnemonic devices
 - cf. “A is for Apple, B is for boy, ...”
 - and significant forms in Phoenician

	' – 'alpu ('ox')
	b – bētu ('house')
	w – wawwū ('hook/peg')
	ḥ – ḥōtu ('fence' ?)
	k – kappu ('palm of hand')
	l – lamdu ('goad')
	m – mayyūma (?) ('water')
	n – naḥāšu ('snake')
	

The History of the Alphabet

The Phoenician Alphabet

- but it's not easy to pass the alphabet from one language to another
 - different languages use different sounds
 - e.g. guttural consonants in Semitic languages, or /th/ in English
 - also, in Semitic languages, words are defined by **consonants**
 - vowels mark tense and other aspects of grammar
 - e.g., **KTB**: *katib* (“writer”), *kitab* (“write”), *katab* (“wrote”)
 - thus, Semitic languages write only consonants
 - cf. JHWH (Jehovah, Jahweh)

The History of the Alphabet

Other Semitic Alphabets

- Hebrew alphabet
 - from Phoenician alphabet
- also, **Aramaic** alphabet
 - thus, Jesus' words in the New Testament are based on the Greek text of an Aramaic minister in Roman Judea
 - the alphabet is about the only thing all these cultures had in common

	Early Phoenician	Moabite	Hebrew Ostraca (sixth century BC)	Early Aramaic	Late Aramaic Papyri	Palmyrene Aramaic	Monumental Nabataean Aramaic	'Square' Jewish/ Hebrew Printed
·	𐤀	𐤁	𐤂	𐤃	𐤄	𐤅	𐤆	א
b	𐤇	𐤈	𐤉	𐤊	𐤋	𐤌	𐤍	ב
g	𐤎	𐤏	𐤐	𐤑	𐤒	𐤓	𐤔	ג
d	𐤕	𐤖	𐤗	𐤘	𐤙	𐤚	𐤛	ד
h	𐤜	𐤝	𐤞	𐤟	𐤠	𐤡	𐤢	ה
w	𐤣	𐤤	𐤥	𐤦	𐤧	𐤨	𐤩	ו
z	𐤪	𐤫	𐤬	𐤭	𐤮	𐤯	𐤰	ז
h	𐤱	𐤲	𐤳	𐤴	𐤵	𐤶	𐤷	ח
t	𐤸	𐤹	𐤺	𐤻	𐤼	𐤽	𐤾	ט
y	𐤿	𐆀	𐆁	𐆂	𐆃	𐆄	𐆅	י
k	𐆆	𐆇	𐆈	𐆉	𐆊	𐆋	𐆌	כ
l	𐆍	𐆎	𐆏	𐆐	𐆑	𐆒	𐆓	ל
m	𐆔	𐆕	𐆖	𐆗	𐆘	𐆙	𐆚	מ
n	𐆛	𐆜	𐆝	𐆞	𐆟	𐆠	𐆡	נ
s	𐆢	𐆣	𐆤	𐆥	𐆦	𐆧	𐆨	ס
·	𐆩	𐆪	𐆫	𐆬	𐆭	𐆮	𐆯	ע
p	𐆰	𐆱	𐆲	𐆳	𐆴	𐆵	𐆶	פ
s	𐆷	𐆸	𐆹	𐆺	𐆻	𐆼	𐆽	צ
q	𐆾	𐆿	𐇀	𐇁	𐇂	𐇃	𐇄	ק
r	𐇅	𐇆	𐇇	𐇈	𐇉	𐇊	𐇋	ר
š	𐇌	𐇍	𐇎	𐇏	𐇐	𐇑	𐇒	ש
t	𐇓	𐇔	𐇕	𐇖	𐇗	𐇘	𐇙	ת

The History of the Alphabet

The Greek Alphabet

- from the Phoenicians, the alphabet was also passed to the Greeks, as the data show

- n.b. Greek letter shapes
- also names: alpha, beta, gamma, ...

- they are nonsense words in Greek

– *Phoinikeia grammata*

- myth of Cadmus

	SINAITIC	CANAANITE- PHOENICIAN	EARLY GREEK	LATER GREEK	LATIN	ENGLISH
ALEPH					A	A
BETH					B	B
GIMEL					C G	C, G
DALETH					D	D
HE (?)					E	E
WAW					F V	F, U, V, W, Y
ZAYIN						Z
HETH					H	H
TETH						(Th)
YOD					I	I, J
KAPH						K
LAMED					L	L
MEM					M	M
NUN					N	N
SAMEK					X	(X)
AYIN					O	O

The History of the Alphabet

The Greek Alphabet

- the Greeks didn't need all the letters handed to them by the Phoenicians
 - especially gutturals like 'aleph
- but the Greeks kept the letter 'aleph (alpha) anyway
 - conservatism!

	SINAITIC	CANAANITE- PHOENICIAN	EARLY GREEK	LATER GREEK	LATIN	ENGLISH
ALEPH					A	A
BETH					B	B
GIMEL					C G	C, G
DALETH					D	D
HE (?)					E	E
WAW					F V	F, U, V, W, Y
ZAYIN						Z
HETH					H	H
TETH						(Th)
YOD					I	I, J
KAPH						K
LAMED					L	L
MEM					M	M
NUN					N	N
SAMEK					X	(X)
AYIN					O	O
PE					P	P
TSADE						(S)
QOPH					Q	Q
RESH					R	R
SHIN					S	S
TAW					T	T

The History of the Alphabet

The Greek Alphabet

- the Greeks added new letters at the end of the alphabet
 - (... pi, rho, sigma, tau, upsilon) phi, chi, psi, omega
 - cf. (... p, r, s, t) u, v, w, x, y, z

	SINAITIC	CANAANITE- PHOENICIAN	EARLY GREEK	LATER GREEK	LATIN	ENGLISH
ALEPH					A	A
BETH					B	B
GIMEL					C G	C, G
DALETH					D	D
HE (?)					E	E
WAW					F V	F, U, V, W, Y
ZAYIN						Z
HETH					H	H
TETH						(Th)
YOD					I	I, J
KAPH						K
LAMED					L	L
MEM					M	M
NUN					N	N
SAMEK					X	(X)
AYIN					O	O
PE					P	P
TSADE						(S)
QOPH					Q	Q
RESH					R	R
SHIN					S	S
TAW					T	T

The History of the Alphabet

The Greek Alphabet

- they replaced these “useless” letters with **vowels**

- vowels are necessary in Indo-European languages
- which is why the vowels do not come together in the alphabet

	SINAITIC	CANAANITE- PHOENICIAN	EARLY GREEK	LATER GREEK	LATIN	ENGLISH
ALEPH					A	A
BETH					B	B
GIMEL					C G	C, G
DALETH					D	D
HE (?)					E	E
WAW					F V	F, U, V, W, Y
ZAYIN						Z
HETH					H	H
TETH						(Th)
YOD					I	I, J
KAPH						K
LAMED					L	L
MEM					M	M
NUN					N	N
SAMEK					X	(X)
AYIN					O	O
PE					P	P
TSADE						(S)
QOPH					Q	Q
RESH					R	R
SHIN					S	S
TAW					T	T

The History of the Alphabet

The Greek Alphabet

The two great pivotal moments in this story (of the alphabet) are the devising of the consonantal alphabet on an acrophonic basis in the early second millennium B.C., and the addition of the vowels to the consonantal repertoire in the earlier part of the first millennium B.C. The first of these steps forward we owe to some uncertain group of inventors, possibly in a scribal school in Palestine, Phoenicia or Syria. The second we owe to the Greeks. The only other invention in this field which is more important than either of these is the invention of writing itself . . .

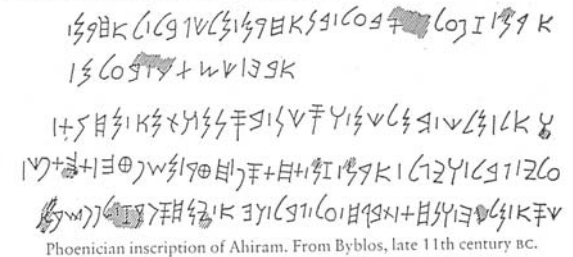
John Healey, *The Early Alphabet*, 62

The History of the Alphabet

The Greek Alphabet

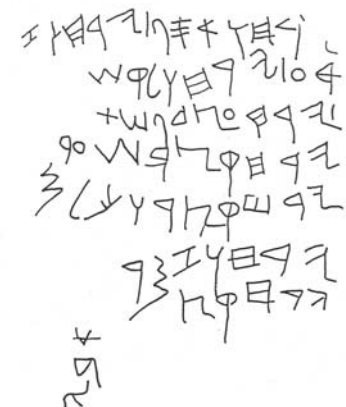
- Hebrews would later borrow the idea of vowels, but in the form of punctuation marks
- Greek writing settles into a left-to-right direction
 - vs. Hebrew/Arabic
 - early Greek writing: **boustrophedon**

The twenty-two-letter Byblian alphabet (the Phoenician alphabet) evolved c. 1050 BC in a direct line of descent from the earlier linear alphabets. As we have seen, the right-to-left orientation of writing and the stylised linear character of the letters became fixed at about this time. The inscription of the Ahiaram sarcophagus, dated c. 1000 BC, finds the script already in a classic form. Other inscriptions, also from Byblos, follow soon after.



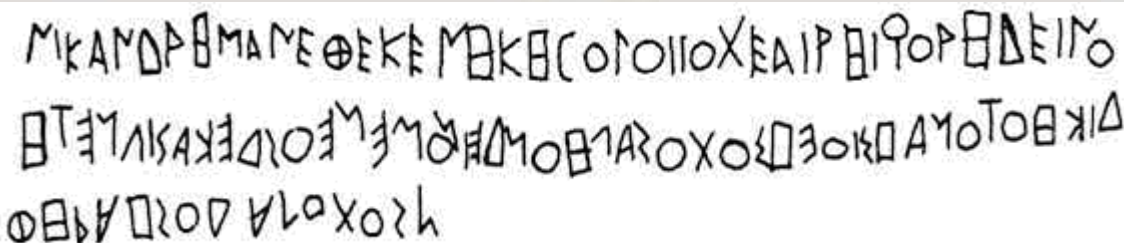
The image shows a photograph of a stone inscription with Phoenician script. The text is arranged in several lines, written from right to left. The characters are stylized and linear, typical of the Phoenician alphabet.

Phoenician inscription of Ahiaram. From Byblos, late 11th century BC.



The image shows a photograph of a small, irregularly shaped stone fragment with Hebrew script. The text is arranged in several lines, written from right to left. The characters are stylized and linear, typical of the Hebrew alphabet.

The Hebrew Gezer 'Calendar', 10th century BC.



The image shows a photograph of a small, irregularly shaped stone fragment with Hebrew script. The text is arranged in several lines, written from right to left. The characters are stylized and linear, typical of the Hebrew alphabet.

The History of the Alphabet

The Roman Alphabet (Latin)

- the **Etruscans** were the first people in Italy to use the alphabet
 - from the Greeks
- then, the Etruscans dominated the early Romans and gave them the alphabet, among other things



The History of the Alphabet

The Roman Alphabet (Latin)

- but the Romans adapted the alphabet to fit Latin
 - c/g (gutturals)
 - **digamma** (/w/): became “f”
 - **zeta**: omitted /z/ and then put it back in at the end of the alphabet
 - cf. “x”

	SINAITIC	CANAANITE- PHOENICIAN	EARLY GREEK	LATER GREEK	LATIN	ENGLISH
ALEPH					A	A
BETH					B	B
GIMEL					C G	C, G
DALETH					D	D
HE (?)					F	F
WAW					F V	F, U, V, W, Y
ZAYIN						Z
HETH					H	H
TETH						(Th)
YOD					I	I, J
KAPH						K
LAMED					L	L
MEM					M	M
NUN					N	N
SAMEK					X	(X)
AYIN					O	O
PE					P	P
TSADE						(S)
QOPH					Q	Q
RESH					R	R
SHIN					S	S
TAW					T	T

The History of the Alphabet

The Medieval Alphabet

- Medieval alphabet: relatively few changes, despite the chance to make many alterations
 - literacy was low, so changes would have affected few people
 - but the alphabet is fundamentally conservative

	SINAITIC	CANAANITE- PHOENICIAN	EARLY GREEK	LATER GREEK	LATIN	ENGLISH
ALEPH					A	A
BETH					B	B
GIMEL					C G	C, G
DALETH					D	D
HE (?)					E	E
WAW					F V	F, U, V, W, Y
ZAYIN						Z
HETH					H	H
TETH						(Th)
YOD					I	I, J
KAPH						K
LAMED					L	L
MEM					M	M
NUN					N	N
SAMEK					X	(X)
AYIN					O	O
PE					P	P
TSADE						(S)
QOPH					Q	Q
RESH					R	R
SHIN					S	S
TAW					T	T

The History of the Alphabet

The Medieval Alphabet

- changes in the alphabet during the Middle Ages:

– I and J: separated

- I (vowel) vs. J (consonant)

- only later, English J: fricative sound (jar)

– also, U, V, W

- n.b. all are next to each other in the alphabet

	SINAITIC	CANAANITE- PHOENICIAN	EARLY GREEK	LATER GREEK	LATIN	ENGLISH
ALEPH	𐤀 𐤁	𐤁 𐤂	Α	Α	A	A
BETH	𐤂 𐤃 𐤄	𐤃 𐤄	Β Γ	Β	B	B
GIMEL	𐤄 𐤅	𐤅	Γ	Γ	C G	C, G
DALETH	𐤅 𐤆	𐤆 𐤇	Δ	Δ	D	D
HE (?)	𐤆	𐤇 𐤈	Ε	Ε	F	F
WAW	𐤇	𐤈	Υ	Υ	F V	F, U, V, W, Y
ZAYIN	𐤈 (?)	𐤈 𐤉	Ζ	Ζ		Z
HETH	𐤈 𐤉	𐤉 𐤊	Θ	Θ	H	H
TETH		𐤊	Θ	Θ		(Th)
YOD	𐤉 𐤊	𐤊	Ι	Ι	I	I, J
KAPH	𐤊 𐤋	𐤋 𐤌	Κ	Κ		K
LAMED	𐤋 𐤌	𐤌 𐤍	Λ	Λ	L	L
MEM	𐤌	𐤍 𐤎	Μ	Μ	M	M
NUN	𐤍 𐤎	𐤎 𐤏	Ν	Ν	N	N
SAMEK	𐤎	𐤏 𐤐	Ξ	Ξ	X	(X)
AYIN	𐤏 𐤐	𐤐 𐤑	Ο	Ο	O	O
PE	𐤐	𐤑 𐤒	Π	Π	P	P
TSADE	𐤑 𐤒	𐤒 𐤓	Τ	Τ		(S)
QOPH	𐤒	𐤓 𐤔	Φ	Φ	Q	Q
RESH	𐤒 𐤓 𐤔	𐤓	Ρ	Ρ	R	R
SHIN	𐤓	𐤔	Σ	Σ	S	S
TAW	𐤔	𐤕	Τ	Τ	T	T

The History of the Alphabet

CONCLUSION: The Alphabet and Spelling

- if the alphabet started out as an attempt to make writing simpler, what happened to English spelling?
 - why do you have to look up a word in the dictionary to see how to spell it?
 - why do we hold spelling bees?
- the answer is that we haven't revised our spelling for years, in some cases centuries!
 - it's part of the **conservatism** of the alphabet

The History of the Alphabet

CONCLUSION: The Alphabet and Spelling

- the result is that there are many archaisms in English spelling
 - i.e. letters that represent sounds no longer pronounced
 - e.g. knight (“kuh-NEE-guh-tuh”)
 - also, gnat, gnaw, folk, would, aisle, eight
 - also, many foreign borrowings which are spelled in foreign ways
 - e.g., buffet, chutzpah
 - cf. garbage: the g’s are pronounced differently

The History of the Alphabet

CONCLUSION: The Alphabet and Spelling

- also, the same sound represented in different ways, e.g.
 - /sh/ sound: shoe, sugar, passion, notion, ocean, champagne, Confucius, Sean
 - long-o vowel sound: go, beau, boat, show, sew, doe, though, escargot
- also, inconsistency with the same base
 - e.g. four, fourth, fourteen, twenty-four . . .
 - but forty? where's the u?

The History of the Alphabet

CONCLUSION: The Alphabet and Spelling

- many influential people have attempted to solve this problem and reform spelling
 - among them: Noah Webster, Arthur Conan Doyle, Charles Darwin, Mark Twain, George Bernard Shaw, Andrew Carnegie, and ...
 - even Brigham Young: the Deseret alphabet!
- but if the “great men” of history can’t enforce good sense and make this change, who can?

The History of the Alphabet

CONCLUSION: The Alphabet and Spelling

- it all comes down to what spelling do you use, when there are different pronunciations of a word?
 - e.g. girl?
 - *gal* (American dialect)
 - *goil* (New York)
 - *gull* (Irish)
 - *gel* (London)
 - *gill* (South African)
 - *gairull* (Scottish)

The History of the Alphabet

CONCLUSION: The Alphabet and Spelling

- the reason for this problem is that, as spoken language evolves, so must spelling
 - it's a disadvantage built into any writing system based on an alphabet and spoken language
 - the dark counterpart to how easy it is to learn ABC's in elementary school
- but it's not easy to learn to spell English!
 - not in our day at least!

The History of the Alphabet

CONCLUSION: The Alphabet and Spelling

- if we keep going the way we are headed right now, the alphabet will become a virtual collection of ideograms!
- yet even if we found a way to fix spelling completely and put that plan into effect today, wouldn't we only need to fix it all again in a few centuries?

The History of the Alphabet

CONCLUSION: The Alphabet and Spelling

- if so, how much more difficult would it be just to learn to write in something like Chinese characters?
 - in Chinese, every word is a separate sign, based on 212 basic radicals
 - complex ideas combine signs, e.g.

電腦	飛機	大學	收音機	貓頭鷹	精神分裂症
computer	aeroplane	university	radio	owl	schizophrenia
(electric brain)	(flying machine)	(great learning)	(receive sound machine)	(cat-headed eagle)	(split mind disease)

- 50,000 symbols total, but only 4000 in common use because combinations can be so productive

The History of the Alphabet

CONCLUSION: The Alphabet and Spelling

- granted, typing is a nightmare
 - 10 words/minute at most, though it's somewhat faster with computers
- also, dictionaries are hard to organize since there's no inherent order to the signs
 - and thus no crossword puzzles, Scrabble or Morse code

The History of the Alphabet

CONCLUSION: The Alphabet and Spelling

- but Chinese writing offers some HUGE advantages to compensate for these losses
 - it does not have to be modified according to dialect or as the Chinese language evolves
 - this form of writing doesn't need to evolve at all, except as new things and ideas arise
 - cf. **asterisk** (*) which hasn't changed since Babylon!

The History of the Alphabet

CONCLUSION: The Alphabet and Spelling

- because Chinese writing is not tied to any language as such, anyone from any language can learn to write “Chinese”
 - people in China who can’t talk to each other can communicate through writing!
 - Confucius could read a modern newspaper!
 - even though he would understand very little of what was being said to him
 - conversely, Socrates could neither read nor understand modern Greek

The History of the Alphabet

CONCLUSION: The Alphabet and Spelling

- so, why don't we all learn to read and write "Chinese"?
- our conservative tendencies—which help us in other ways—are betraying us here:
 - they tell us that we can't change to a "better" system of writing
 - and so we're stuck with archaic spelling
 - but think what a favor we'd be doing our descendants if we had the energy, drive and foresite to affect this change!
 - or is that foresight? and effect?