

Chapter 9 *The First Alphabet*



The birthplace of the alphabet? The convenience of an alphabet would surely have assisted the process of interstate trade, polyglot haggling and record-keeping in the bazaars of ancient Palestine, Lebanon and Syria, where several cultures met. Left Modern souk, Aleppo, Syria.

ANDREW ROBINSON

THE
STORY
OF

WRITING

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I dedicate this book to my mother, who encouraged me to read

Author's note

Brian Lapping, an innovative television producer, enabled me to undertake a period of research into writing systems in 1989–90. I am duly grateful.

No one person could be an expert on all the writing systems discussed in this book. I cannot claim to be an expert in any one of them. I have therefore relied on the work of genuine experts, none of whom will be fully satisfied with my summaries of what are extremely complex and subtle issues. I have tried to take account of their knowledgeable criticisms but hasten to add – more forcefully than usual for an author – that any errors are my sole responsibility.

I offer sincere thanks to John Chadwick (*The Decipherment of Linear B*), Michael Coe (*Breaking the Maya Code*), John DeFrancis (*The Chinese Language and Visible Speech*), Asko Parpola (*Deciphering the Indus Script*) and J. Marshall Unger (*The Fifth Generation Fallacy*) for their detailed comments and their encouragement. I also thank Irving Finkel, and Carol

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For Japanese, Tetsuo Amaya was unfailingly helpful and imaginative; he also provided several examples of Japanese script. Krishna Dutta provided a sample of Bengali script.

Concerning Michael Ventris and the decipherment of Linear B, I thank Patrick Hunter, former classics master of Ventris who witnessed the beginning of Ventris' obsession in 1936; Prudence Smith, BBC radio producer who witnessed Ventris' moment of breakthrough in 1952; and Oliver Cox, friend and fellow architect of Ventris. Patrick Hunter kindly gave me a few personal items in the handwriting of Ventris which I shall always value. While writing this book, I like to think that I have been inspired, to the best of my ability, by the open-minded and generous intellectual spirit of Ventris.

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The Riddle of the Alphabet

The origin of writing is, as we have seen, full of riddles. Perhaps the most perplexing one of all is that of the alphabet. That it reached the modern world via the ancient Greeks is well known, but we have no clear idea of how and when it appeared in Greece, and how, even more fundamentally, the idea of an alphabet first occurred to the pre-Greek societies at the eastern end of the Mediterranean during the 2nd millennium BC. Scholars have devoted their lives to these questions, but the evidence is too scanty for firm conclusions. Did the alphabet evolve from the scripts of Mesopotamia, Egypt and Crete – or did it strike a single unknown individual in a ‘flash’? And why was an alphabet thought necessary? Was it the result of commercial imperatives, as seems most likely? In other words, did business require a simpler and quicker means of recording transactions than, say, Babylonian cuneiform or Egyptian hieroglyphs, and also a convenient way to write the babel of languages of the various empires and groups trading with each other around the Mediterranean? If so, then it is surprising that there is zero evidence of trade and commerce in the early inscriptions of Greece. This, and other considerations, have led some scholars to postulate that the Greek alphabet was invented in order to record the epics of Homer.

In the absence of proof, anecdote and myth have filled the vacuum. Children are often evoked as inventors of the alphabet, because they do not have the preconceptions and investment in existing scripts that adults have. One possibility is that a bright Canaanite child in northern Syria, fed up

with having to learn cuneiform, took the uniconsonantal idea from Egyptian hieroglyphs and invented some new signs for the basic consonantal sounds of his own Semitic language. Perhaps he doodled them first in the dust of some ancient street: a simple outline of a house, ‘beth’ (the ‘bet’ in ‘alphabet’), became the sign for ‘b’. In our own time, Rudyard Kipling’s child protagonist in *How The Alphabet Was Made*, Taffimai, designs what she calls ‘noise-pictures’. The letter A is a picture of a carp with its mouth wide open; this, Taffy tells her father, looks like his open mouth when he utters the sound *ah*. The letter O matches the egg-or-stone shape and resembles her father’s mouth saying *oh*. The letter S represents a snake, and stands for the hissing sound of the snake. In this somewhat far-fetched way, a whole alphabet is created by Taffimai.



According to Rudyard Kipling, the letters of the alphabet were invented by the child Taffimai. Here Kipling drew the birth of ‘A’.

The Middle East when the alphabet was born, c. 1500 BC. Was the alphabet the result of the need for more efficient commerce?

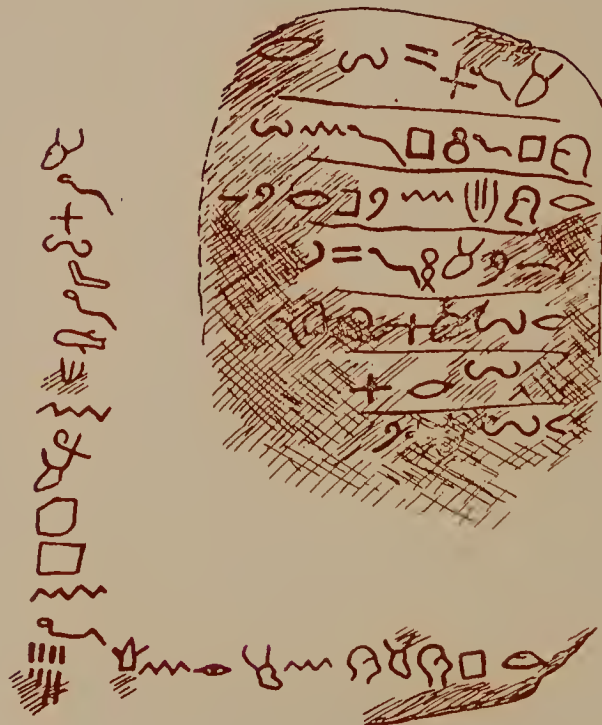


The Earliest 'Alphabetic' Inscriptions



In *Jerusalem*, the poet William Blake wrote of 'God . . . in mysterious Sinai's awful cave/ To Man the wond'rous art of writing gave.' A small sphinx in the British Museum once seemed to show that Blake was right, at least about the origin of the alphabet. The sphinx was found in 1905 at Serabit el-Khadim in Sinai, a desolate place remote from civilization, by the archaeologist Sir Flinders Petrie. He was excavating some old turquoise mines that were active in ancient Egyptian times. Petrie dated the sphinx to the middle of the 18th dynasty; nowadays its date is thought to be about 1500 BC. On one side of it is a strange inscription. On the other, and between the paws, there are further inscriptions of the same kind, plus some Egyptian hieroglyphs which read: 'beloved of Hathor, mistress of turquoise'.

There were other inscriptions written on the rocks of this remote area, such as these:

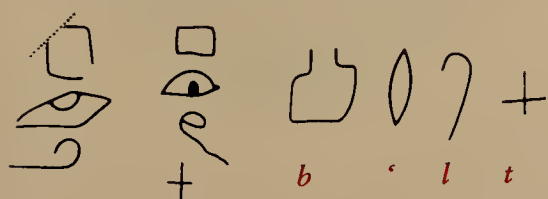


Petrie guessed that the script was probably an alphabet, because it consisted of less than 30 signs; and he thought that its language was probably Semitic, since he knew that Semites from Canaan – modern Israel and Lebanon – had worked these mines for the pharaohs, in many cases as slaves. Ten years later, the Egyptologist Sir Alan Gardiner studied the ‘Proto-Sinaitic’ signs and noted resemblances between some of them and certain pictographic Egyptian hieroglyphs. Gardiner now named each sign with the Semitic word equivalent to the sign’s meaning in Egyptian (the Semitic words were known from biblical scholarship):

PROTOSINAITIC SIGNS	EGYPTIAN SIGN	SEMITIC NAME
		’aleph (ox)
		beth (house)
		gimel (throwstick)
		daleth (door)

These Semitic names are the same as the names of the letters of the Hebrew alphabet – a fact that did not surprise Gardiner, since he knew that the Hebrews had lived in Canaan in the late 2nd millennium BC. But while the names are the same, the *shapes* of the Hebrew letters are different (p. 173).

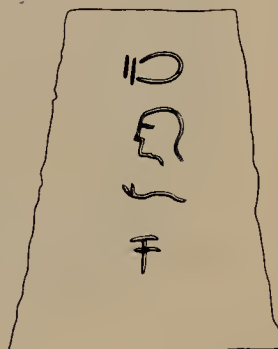
Gardiner’s hypothesis enabled him to translate one of the inscriptions that occurred on the Sinai sphinx:



In English transcription, this would be ‘Baalat’, with the vowels spelt out. Hebrew and other Semitic scripts do not indicate vowels; the reader guesses the vowels from his or her knowledge of the language. Gardiner’s reading made sense: Baalat means ‘the Lady’ and is a recognized Semitic name for the goddess Hathor in the Sinai region. So the inscription on the sphinx seemed to be a bilingual. Unfortunately no further decipherment proved tenable, mainly because of lack of material and the fact that many of the Proto-Sinaitic signs had no hieroglyphic equivalents. Scholarly hopes of finding the story of the Exodus in these scratchings were scotched. Nevertheless, it is quite possible that a script similar to the Proto-Sinaitic script was used by Moses to write down the Ten Commandments on tablets of stone.

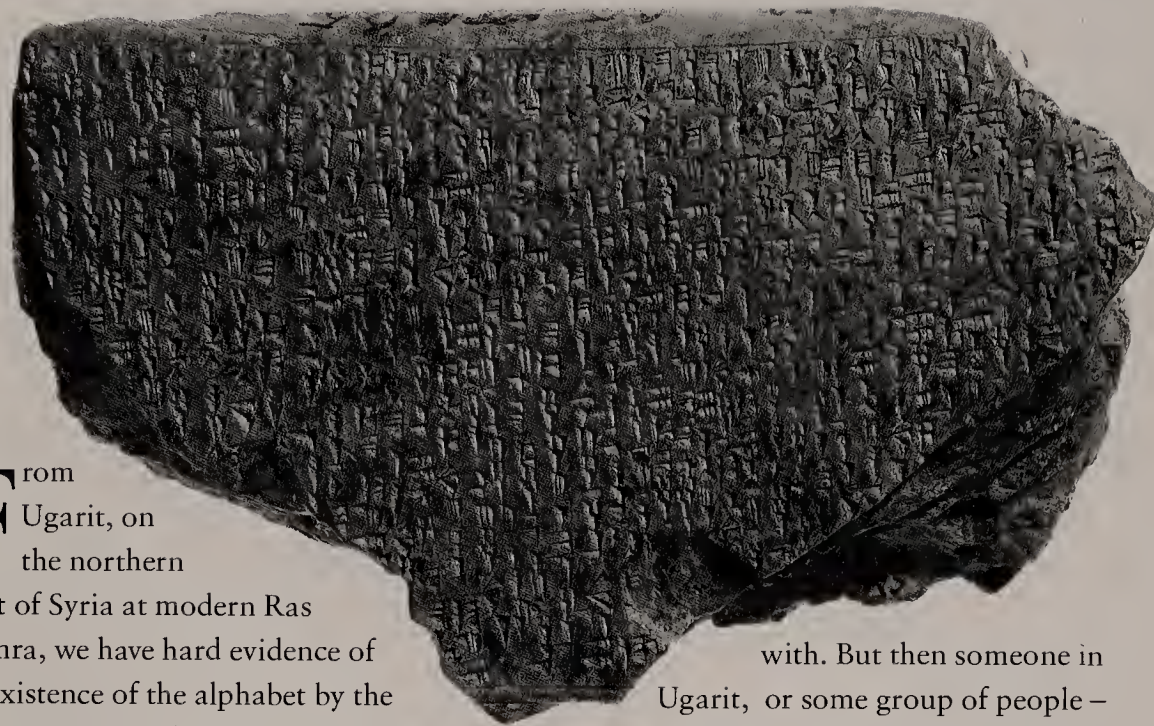
Proto-Canaanite scripts

We still do not know if Gardiner’s 1916 guess was correct, plausible though it is. For some decades after Petrie’s discoveries in Sinai, the inscriptions were taken to be the ‘missing link’ between the Egyptian and Phoenician (alphabetic) scripts. But why should lowly miners in out-of-the-way Sinai have created an alphabet? *Prima facie*, they seem to be unlikely inventors. Subsequent discoveries in Lebanon and Israel (*right*) have shown the Sinaitic theory of the alphabet to be a romantic fiction. These suggest that Canaanites were the inventors of the alphabet, which would be reasonable. They were cosmopolitan traders at the crossroads of the Egyptian, Hittite, Babylonian and Cretan empires; they were not wedded to an existing writing system; they needed a script that was easy to learn, quick to write and unambiguous. Although unproven, it is probable that the Canaanites created the first alphabet.



Fragmentary Proto-Canaanite inscriptions from (top) Shechem, (middle) Gezer (on a potsherd), (bottom) Lachish (on a dagger). The dates are believed to be 17th and 16th centuries BC, i.e. before the Proto-Sinaitic inscriptions. The meanings are unknown.

An Alphabet in Cuneiform



Literary tablet from Ugarit, northern Syria, written in alphabetic cuneiform, c. 14th century BC.

From Ugarit, on the northern coast of Syria at modern Ras Shamra, we have hard evidence of the existence of the alphabet by the 14th century BC, that is well after the date of the Proto-Sinaitic writing. The kingdom of Ugarit was a grand one by Canaanite standards. Its capital covered 52 acres and was heavily fortified. Large donkey caravans converged on the city from Syria, Mesopotamia and Anatolia to exchange goods with merchants from Canaan and Egypt as well as the maritime traders who arrived by ship from Crete and Cyprus and the Aegean. The city functioned as a great bazaar. Its trade can be gauged from the cargo of a shipwreck excavated not long ago off the southern coast of Turkey – copper, tin, tools, chemicals, glass ingots, faience and amber beads, ceramics, ivory, jewellery, luxury goods, semi-precious stones, textiles and timber. No less than ten languages and five different scripts were in use at Ugarit, which walked a political tightrope between the Egyptian and Hittite empires.

The dominant script appears to have been Akkadian cuneiform, at least to begin

with. But then someone in Ugarit, or some group of people – perhaps senior merchants? – decided, it appears, that Akkadian cuneiform was too cumbersome and unreliable a system for writing the city's native Semitic tongue. Instead an alphabet was introduced, presumably imported from further south in Canaan (we do not know for sure). Rather than adopting a small set of pictographic or quasi-pictographic signs, however, the people of Ugarit were conservative: they decided to write their new alphabet in cuneiform. They therefore invented a set of simple cuneiform signs, some 30 in all, that bore no resemblance to the signs of Akkadian cuneiform, just as the signs of Old

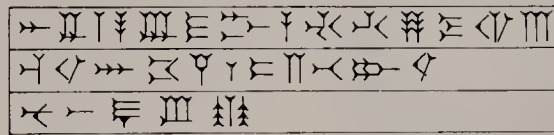
Bilingual seal of Mursilis III, Hittite king, from the palace, Ugarit.





Left **Bronze statuette of a god, possibly Baal, from Ugarit.**

the signs was probably adopted from that of Proto-Canaanite alphabets (whose order of signs admittedly is unknown). We can guess this from the fact that some of the tablets are abecedaries, that is, they list the signs in the cuneiform script in a fixed order that resembles the modern order we have inherited nearly 3500 years later. Here is an example:



'a b g h d h w z h t y k š l
 m d n z s ' p š q r t
 ġ t 'i 'u ś

Below **Silver statuette from Ugarit.**

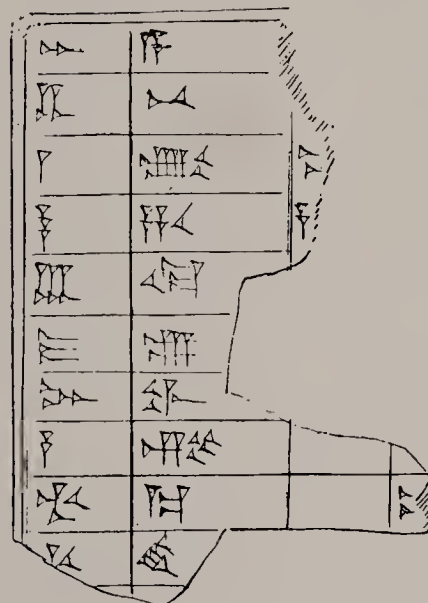
Persian cuneiform invented under Darius bear no resemblance to those of the much older Babylonian cuneiform. Ugaritic cuneiform would have been gibberish to a Babylonian scribe.

Over 1000 tablets in Ugaritic cuneiform have been discovered since 1929. They consist of administrative texts – commercial correspondence, tax accounts and other governmental business records – written with 30 signs, and literary and religious texts written with only 27 signs. The latter bear striking similarities, in theme and even in phrasing, to stories from parts of the Old Testament. It seems that these biblical stories were written down many centuries before they were written in Hebrew.

Abecedaries

How did the Ugaritic inventor decide on the shapes of the signs and their order? Most likely the simplest signs were applied to the most frequently heard sounds. The order of

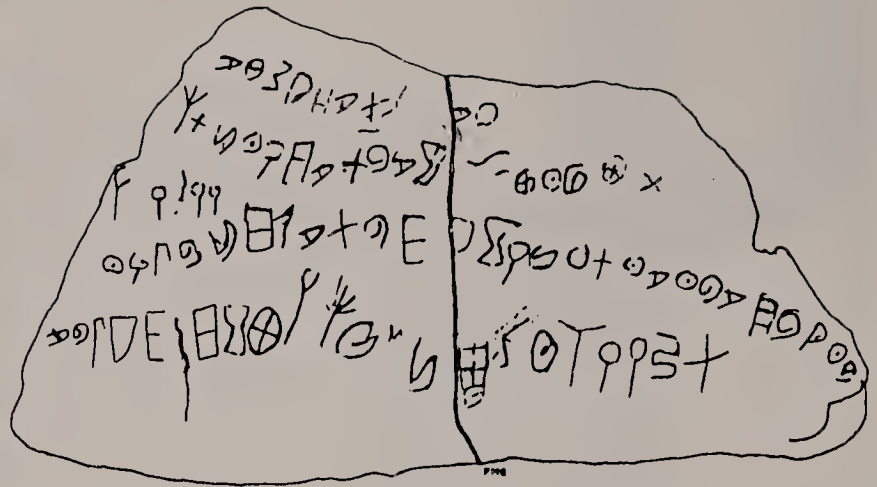
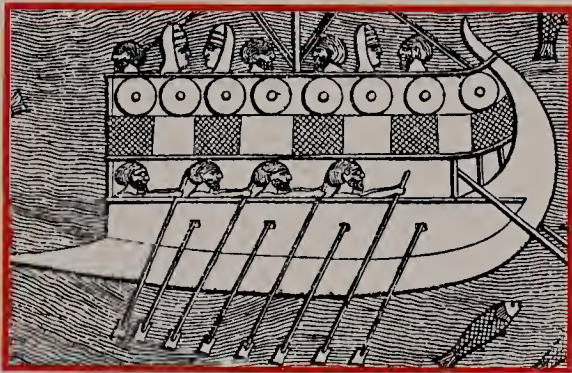
Another tablet (broken), discovered only in 1955, goes even further. It lists the Ugaritic signs in the same order as before (*below left*) and adds to each one its Akkadian syllabic equivalent (right-hand part of fragment). The tablet is in fact a school tablet: we can imagine some unfortunate child from Ugarit in the last centuries of the 2nd millennium BC labouring over the hundreds of Akkadian signs and wondering why anyone should want to write in Akkadian script when a simple alternative was available.



' a
 b be
 g ga
 h ha
 ... etc.

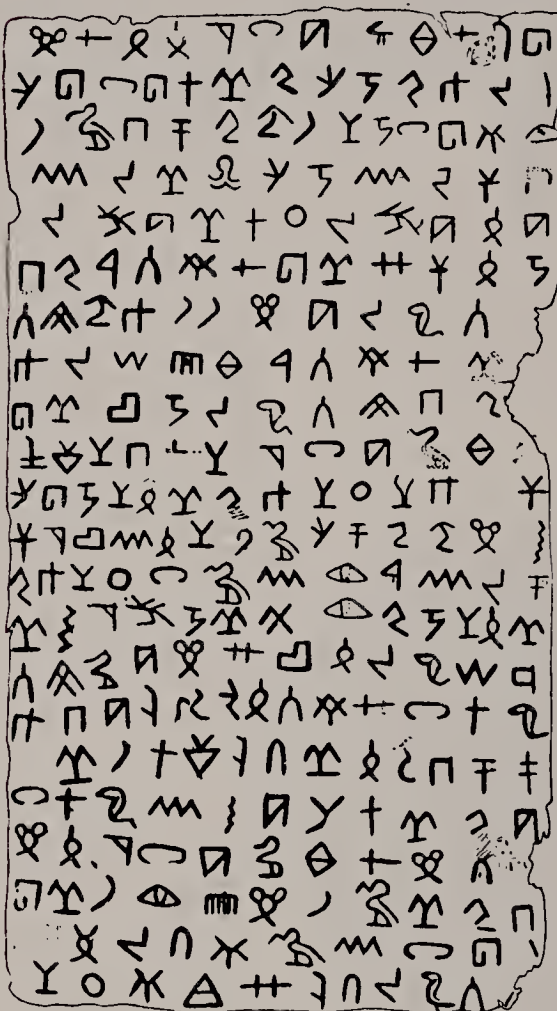


The Phoenician Letters



There is no clear line of descent from the Proto-Canaanite inscriptions of the first half of the 2nd millennium BC to the relatively stable alphabetic script written by the Phoenicians from about 1000 BC, the forerunner of the Hebrew script and the Greek alphabet. Ugarit and its cuneiform script seem to have been wiped out in about 1200 BC by the influx of the Sea Peoples. Another experiment in creating a script (*right*) took place on the coast south of Ugarit, at Byblos, some time during the 2nd millennium (the date is very uncertain). The script has been called 'pseudo-hieroglyphic', implying that it was influenced by Egyptian hieroglyphs. While this is quite possible, there is no certainty, and some of the signs resemble Cretan Linear A, an equally likely candidate as an influence. The meaning of the signs is completely opaque; all that can be said for sure is that there are about 120 distinct signs, and hence the script cannot be an alphabet. It seems to have had no effect on the subsequent Phoenician script.

Another early inscription (*top right*) from what is now Israel, dated to about the 12th century BC, suggests that the alphabetic idea was catching on. It contains more than 80 letters in five lines written by an unskilled



hand, and appears to be a rather unsuccessful attempt by a semi-literate person at writing an abecedary, that after some letters degenerated into a collection of random signs without meaning.

Above left **Drawing of a relief from the Assyrian palace of Sennacherib, showing the flight of the Phoenicians in their ships, c. 700 BC.**

Above **Ostracon from Israel, c. 12th century BC.**

Left **'Pseudo-hieroglyphic' script (as yet undeciphered) from Byblos on the Phoenician coast, 2nd millennium BC.**

Opposite page **Phoenician inscriptions, which are found all around the Mediterranean.**

Top **Inscription from Idalion, Cyprus, 391 BC, commemorating the dedication of gold plating by the king of Kition and Idalion.**

Middle **The earliest, such as this sarcophagus inscription of King Ahiiram of Byblos, date from the 11th century BC.**

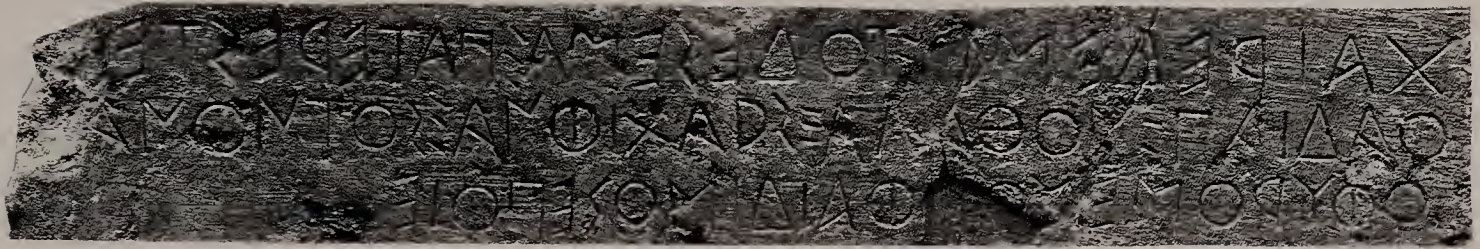
Bottom **The latest, in the Punic script, dates from the 3rd century AD.**

What the Greeks Heard

The Greek historian Herodotus called the alphabet ‘phoinikeia grammata’, ‘Phoenician letters’, brought to Greece, he said, by the legendary Kadmos. Some 2500 years later, we are not much further in accounting for the origin of the Greek alphabet. Every scholar agrees that the Greeks borrowed the alphabet from the Phoenicians, but most now think this occurred among Greeks living in Phoenicia, from where it spread to the mother country.

We can visualize a Greek sitting with a Phoenician teacher and copying down the signs and sounds, as the Phoenician pronounced each sign. The scope for distortion was considerable, because the ‘barbarous’ Phoenician letter names would not have rolled naturally off the Greek tongue. Consider how the untrained English ear cannot distinguish between ‘rue’ (street) and ‘roux’ (reddish) in French. Every language offers many similar examples. So Phoenician ‘aleph’ (ox) became ‘alpha’ in Greek, ‘beth’ (house) became ‘beta’, ‘gimel’ (throw stick) became ‘gamma’, and so on. In the process, the names became meaningless (as is the word alphabet). The 22 Phoenician consonants were adopted as Greek consonants *and* vowels, and three new signs were added. Although the introduction of vowels seems a major innovation, it seems to have occurred not because the Greek adapter intended it but because he could find no other way of transferring a particular Phoenician consonant into Greek. The consonants are ‘weak’, sometimes known as semivowels. Thus ‘aleph’, the glottal stop pronounced like a coughed *ah*, sounded to Greek ears like a funny way of saying *a*.

Phoenician	Name	Phonetic value	Early Greek	Classical Greek	Name
	aleph	ʾ			alpha
	beth	b			beta
	gimel	g			gamma
	daleth	d			delta
	he	h			epsilon
	waw	w			digamma
	zayin	z			zeta
	het	ḥ			eta
	teth	t			theta
	yod	y			iota
	kaph	k			kappa
	lamed	l			lambda
	mem	m			mu
	nun	n			nu
	samekh	s			xi
	ayin	ʿ			omicron
	pe	p			pi
	sade	s			san
	qoph	q			qoppa
	reš	r			rho
	šin	sh/s			sigma
	taw	t			tau
					upsilon
					chi
					omega



The Greeks and the Alphabet

There are two major difficulties in deciding the date of invention of the Greek alphabet. First, the earliest known alphabetic Greek inscription dates from only about 730 BC. Second, there are no known practical or business documents for over 200 years after the invention of the Greek alphabet.

Before the decipherment of Linear B in 1952, the Greeks were regarded as illiterate until the arrival of the alphabet. Since the decipherment, it has been conventional to imagine a 'Dark Age' of illiteracy in Greece between the fall of the Homeric Greeks and the rise of the classical Greeks after, say, 800 BC. In other words, Linear B disappeared and with it went Greek knowledge of writing. This is still the orthodox view. Some scholars, however, believe that this 'Dark Age' is a fiction, and that the Greeks had knowledge of alphabetic writing much earlier than the 8th century BC, perhaps as early as 1100 BC. A principal piece of evidence in favour of this theory is that the direction of early Greek inscriptions is unstable: sometimes they run from right to left, sometimes from left to right, sometimes boustrophedon. But the direction of Phoenician writing, itself unstable prior to about 1050 BC, *was* stable, from right to left, probably by 800 BC. So, the argument goes, the Greeks must have borrowed the Phoenician script in the earlier phase of its development, not after it had settled down.

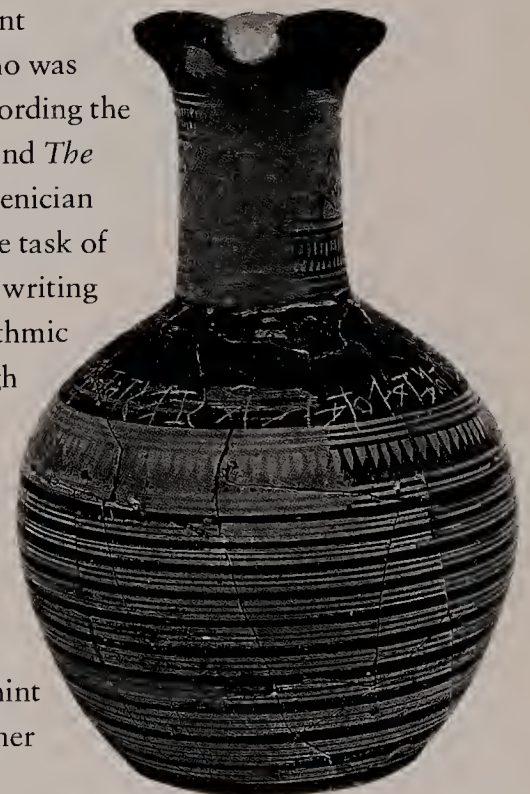
The date of the invention – anywhere between 1100 and 800 BC – is therefore

controversial and is likely to be resolved only by the discovery of Greek inscriptions prior to the 8th century BC.

Even more controversial is *why* the alphabetic script suddenly appeared. It is certainly extraordinary that there are no economic documents among the early Greek inscriptions, unlike Linear B inscriptions. Instead the early alphabet users from all parts of Greece display private, almost literary concerns. Could economic inscriptions have existed once and simply perished, being written on impermanent materials? It seems unlikely that no trace would remain, where other documents have survived. One solution to the conundrum, seriously considered by a few scholars, is that the inventor of the alphabet was a brilliant contemporary of Homer who was inspired to find a way of recording the poet's oral epics, *The Iliad* and *The Odyssey*. The vowelless Phoenician system proved useless for the task of writing epic verse, so a new writing system with vowels and rhythmic subtlety was needed. Though there are solid grounds for this theory, it is surely likely that knowledge of such a feat would have been preserved by the Greeks themselves. But – sad to say for romantics – there is no hint in Greek tradition that Homer and the origin of the alphabet are connected.

Greek boustrophedon inscription, an epitaph, c. 550 BC. The reversed letters in the first two lines are clearly visible.

The earliest Greek inscription, a vase from Athens, c. 730 BC, inscribed to 'him who dances most delicately'; probably it was a prize.



Chapter 10 *New Alphabets From Old*



Etruscan 'bucchero' jug, 6th century BC, inscribed with the Etruscan alphabet. The Etruscans borrowed the alphabet of the Greeks, altered it, and transmitted it to the Romans. Today most nations use an alphabet.

The Family of Alphabets

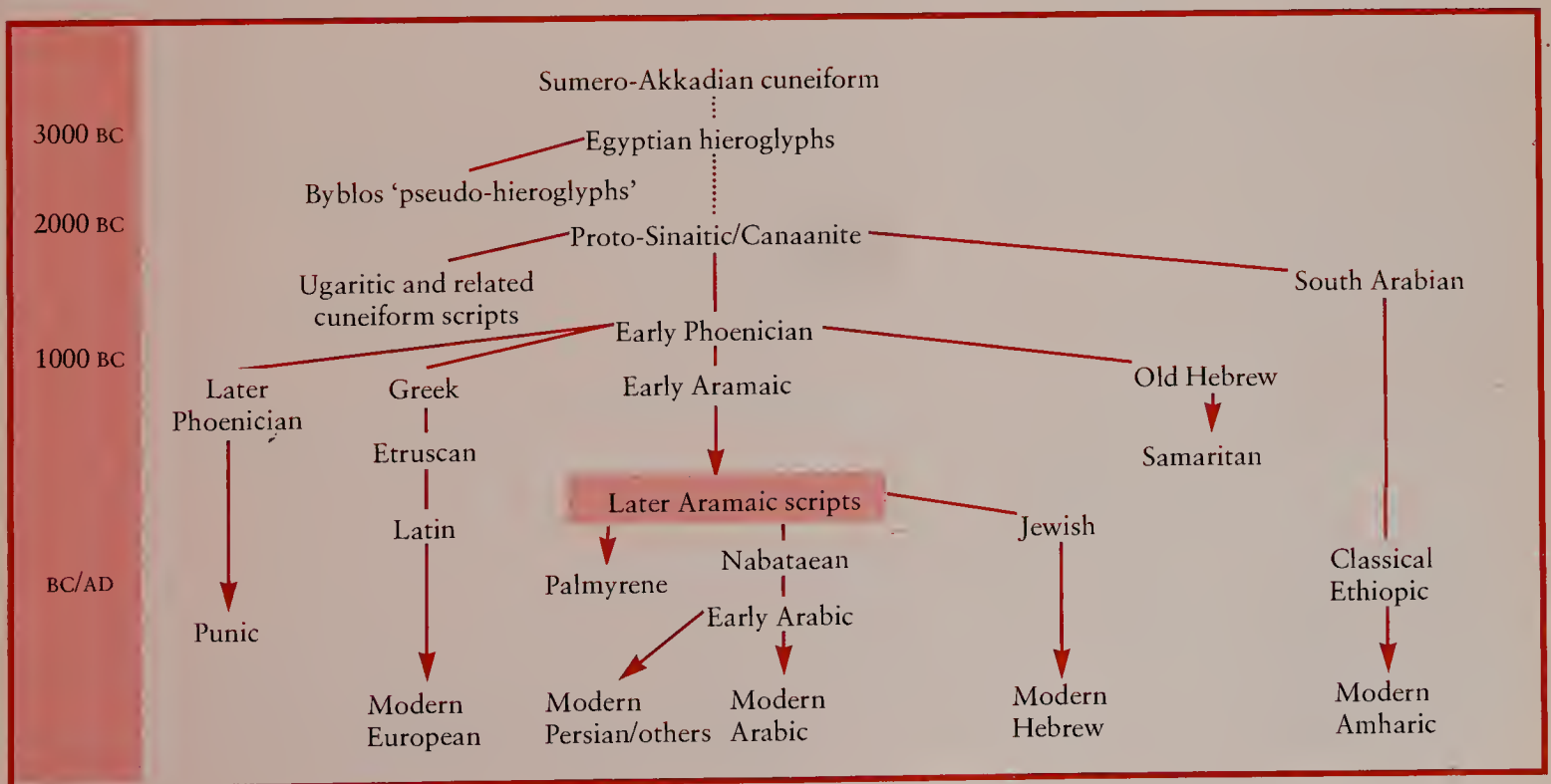
From its unclear origins on the eastern shores of the Mediterranean, writing employing the alphabetic principle spread – to the West (via Greek) to modern Europe, to the East (via Aramaic, in all probability) to modern India. Today, as a consequence of the colonial empires, most of the world’s peoples except the Chinese and Japanese write in an alphabetic script. Most alphabets use between 20 and 30 basic symbols; the smallest, Rotokas, used in the Solomon Islands, has 11 letters, the largest, Khmer, used in Kampuchea, has 74 letters.

The alphabetic link between the Greeks and the Romans was, as we have seen, the Etruscans. They inscribed many objects with the alphabet, such as the ‘buccherio’ jug opposite, which dates from the 6th century BC. And in Mesopotamia, by the 5th century BC, many cuneiform documents carried

a notation of their substance in the Aramaic alphabet, inked onto the tablet with a brush. From the time of Alexander the Great, cuneiform was increasingly superseded by Aramaic; it eventually disappeared around the beginning of the Christian era. In Egypt, fairly soon after that, the Coptic alphabet supplanted Egyptian hieroglyphs.

The time chart below shows how some of the modern alphabetic scripts emerged from the Proto-Sinaitic/Canaanite scripts. It does not include the Indian scripts, since their connection with Aramaic is problematic and, strictly speaking, only partially proven. Nor does it show later alphabets such as the Cyrillic alphabet used in Russia, which was adapted from the Greek alphabet in the 9th century AD, the Korean Hangul alphabet, invented in the 15th century, or the so-called Cherokee alphabet, invented in 1821.

Evolution of the main European alphabetic scripts. (Time-scale approximate. After Healey)



The Greek and Latin Letters

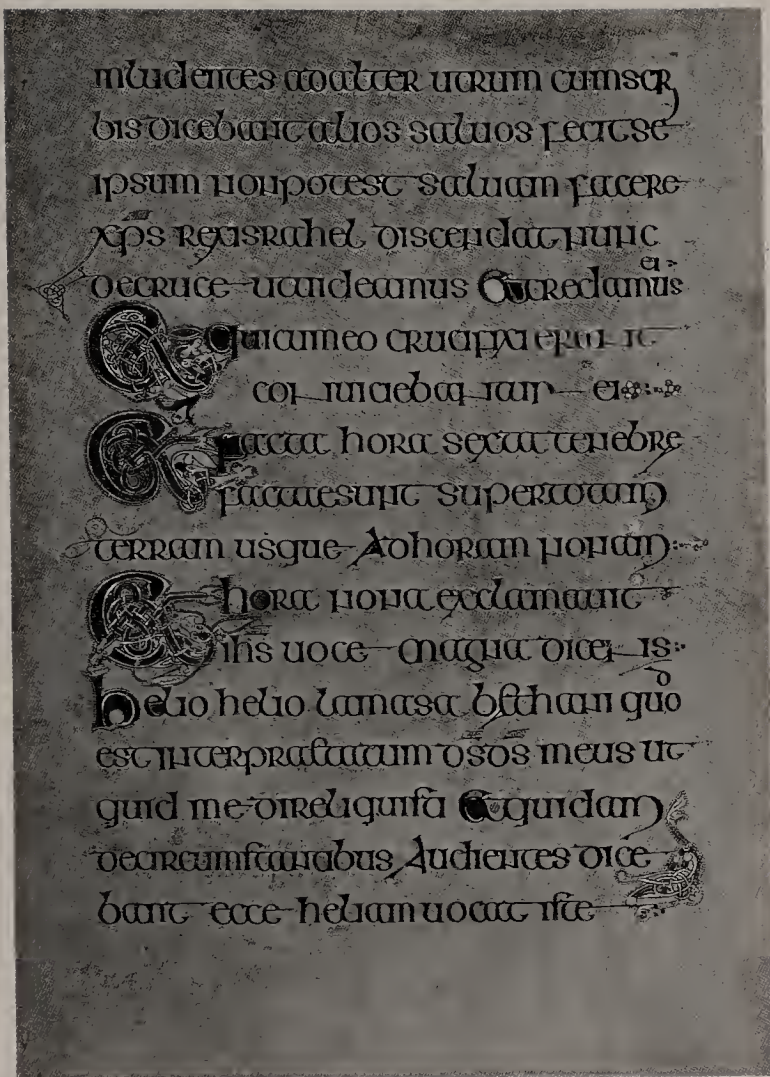
There was more than one alphabet in ancient Greece. The alphabetic signs of classical Greece, which are still in use in Greece today, are known as the Ionian alphabet. They did not become compulsory in Athenian documents until 403–2 BC. Long before that, Greek colonists had taken a somewhat different script, the Euboean alphabet, to Italy. This was taken over by the Etruscans, with some modifications, and later adopted by the Romans.

The reason why modern European and modern Greek letter-forms differ can therefore be traced to the use of the Euboean alphabet in Italy from about 750 BC. For instance, the letters A and B descend from the same signs in both the Euboean and Ionian alphabets, while C and D descend from the Euboean form, which differs from the Ionian forms preserved in the modern Greek Γ and Δ.

As an example of Etruscan and Roman modification, let us take the Euboean Γ. The Etruscans had no distinct /g/ sound, and so they employed the g sign [for /k/. The old k sign therefore ceased to be of use, being replaced by C (pronounced as in 'cat'). And so the alphabet came to the Romans basically without any K (though the Romans chose to retain K for a very few specific words). But they, unlike the Etruscans, required to represent /g/: since the sign [was already spoken for (it was representing /k/ in Etruscan and would continue to do so in Latin), the Romans invented a new sign for /g/ by adding a stroke to the existing C, thereby producing G.

The Roman/Latin script was modified slightly in turn, on the way to becoming its

Phoenician	Phoenician name	Modern symbol	Early Greek	Classical Greek	Greek name	Early Latin	Classical Latin
	'aleph	'			alpha		A
	beth	b			beta		B
	gimel	g			gamma		C
	daleth	d			delta		D
	he	h			epsilon		E
	waw	w			digamma		F
	zayin	z			zeta		G
	heth	h			eta		H
	teth	t			theta		I
	yod	y			iota		(J)
	kaph	k			kappa		K
	lamed	l			lambda		L
	mem	m			mu		M
	nun	n			nu		N
	samek	s			xi		O
	ayin	'			omicron		O
	pe	p			pi		P
	sade	s			san		Q
	qoph	o			qoppa		R
	reš	r			rho		S
	šin	sh/s			sigma		T
	taw	t			tau		V
					upsilon		U
					chi		X
					omega		Y
							Z
PHOENICIAN			GREEK			LATIN	

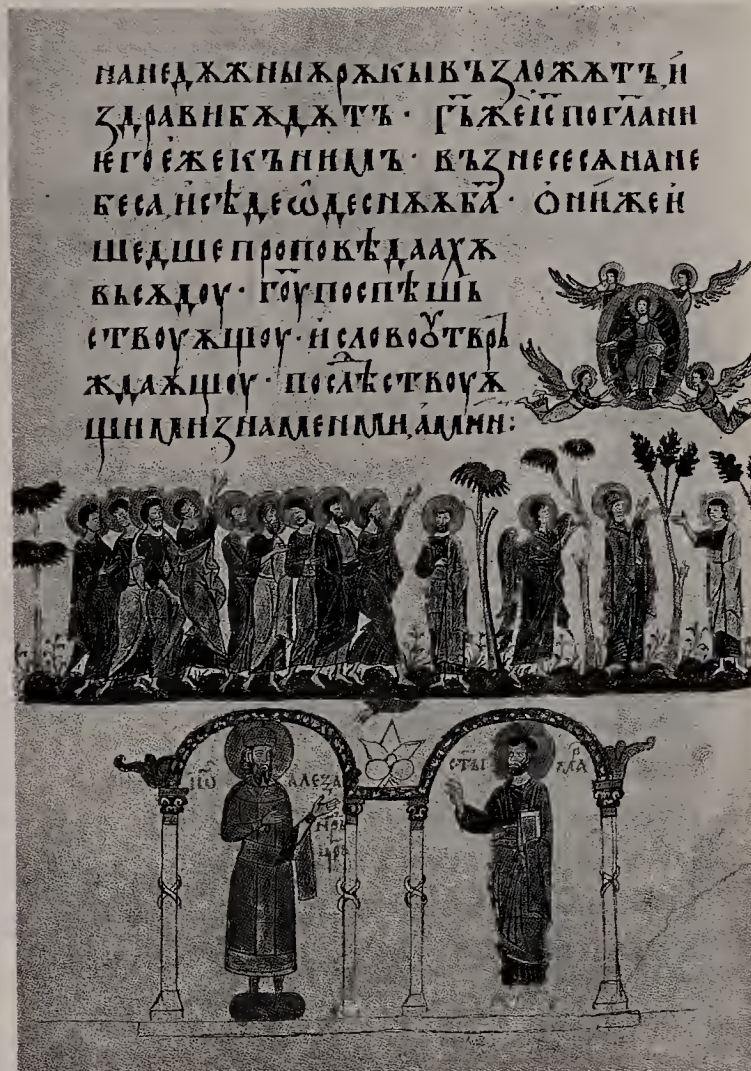


modern English equivalent. There were four sounds in Anglo-Saxon for which there were no counterparts in Latin:

(1) /w/ came to be written with a runic symbol ƿ known as wynn. In Middle English, this was replaced by ‘uu’ or ‘w’; it is rarely found after 1300.

(2) /θ/ and / ð / – as in modern English ‘thin’ and ‘this’ – came to be written by a runic symbol known as thorn, ư. To this was later added the symbol Ʒ, which was called eth. In Middle English both letters were replaced by ‘th’. But ư has survived in the ‘Y’ of the artificial modern form ‘Ye Olde English Tea Shoppe’.

(3) /a/ – as in modern English ‘hat’ – was represented using the Latin digraph æ, which came to be called ash, after the name of the runic symbol representing the same sound.



In Middle English this too had fallen out of use, probably as a result of sound changes.

Cyrillic became the script for more than 60 languages. Its inventor was alleged to be St Cyril (c. 827–69), who was entrusted with the mission by the Byzantine emperor Constantine at the request of the Slav king of Moravia; the king wanted a script which was independent of the Roman church, and which recognized only Hebrew, Greek and Latin for the translation of the Bible.

This is the legend; in fact Cyril seems to have devised the Glagolitic alphabet – while the Cyrillic script was actually created later. The Cyrillic script had 43 letters, the majority of which appear to have been derived from the Greek scripts of the time. Today’s Cyrillic scripts usually have about 30 letters.

Above left **The Book of Kells**, before AD 807, kept in Trinity College Library, Dublin. This manuscript of the Gospels is written in the so-called Insular script developed by Irish monks from the uncial script used in official Roman documents of the 3rd century AD onwards (Latin ‘litterae unciales’ means ‘inch-high letters’). Each monastery developed its own characteristic variant of uncials.

Above right **The Cyrillic script**, used to write the Four Gospels for Tsar Ivan Alexandre of Bulgaria, 1355–6. The script is best known today for its use as the Russian alphabet.

Hebrew and the Aramaic Script

Hebrew is well known as the script of orthodox Jewry and a national script of modern Israel. Less well known is the fact that there are two distinct Hebrew scripts. The first, found only in religious literature and among a tiny community of Samaritans, is by far the older, having evolved from the Phoenician script around the 9th century BC and disappeared from secular use with the dispersion of the Jews in the 6th century BC. The second script, sometimes known as the Jewish script or 'square Hebrew', evolved from Aramaic (used by the Jews in their Babylonian captivity), after they returned to the province of Judah. 'Square Hebrew' dates from the late 3rd century AD, and is

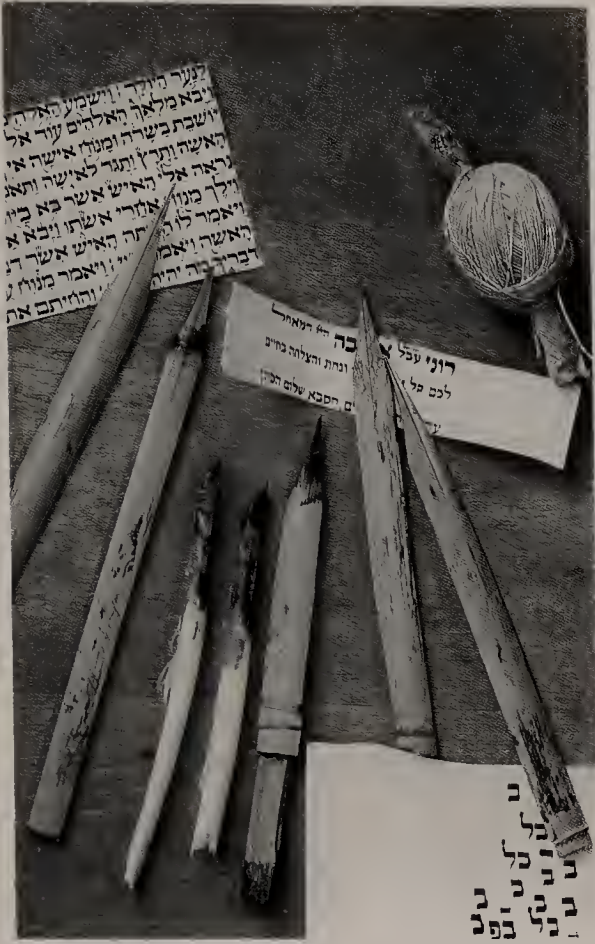
the script now used in Israel. The original Hebrew script and its later form seem to have influenced one another quite strongly.

Aramaic, which grew out of the Phoenician script, was immensely influential for well over 1000 years. The official script of the later Babylonian, Assyrian and Persian empires (thus displacing cuneiform), it was also the vernacular language of Jesus Christ and the Apostles, and probably the original language of the Gospels (the Dead Sea Scrolls are written in Aramaic). It was also the principal language of traders from Egypt and Asia Minor to India. Its extinction came only with the unifying force of Arabic (whose script descended from Aramaic script) and Islam during the 7th century AD.

Right Writing implements of a Sefardi scribe in Jerusalem, late 19th century. The script is 'square Hebrew'. For centuries it was used only for religious literature, but from the 19th century onwards it began to be used for colloquial writing too. Today it is a national script of Israel.



One of the Dead Sea Scrolls, mid-1st century AD, written in ink on leather. The Dead Sea Scrolls were written in the Aramaic script, which was probably the script of the Gospels, from which 'square Hebrew' evolved and subsequently modern Hebrew. The script of the scrolls is similar enough to modern printed Hebrew to be read with ease.



Semitic Languages

Both Hebrew and Aramaic are Semitic languages. In principle, Semitic scripts do not mark vowels, only the 22 consonants. Thus the three letters in Hebrew that stand for *ktb* or *ktv* can take the meanings: ‘katav’ (I wrote), ‘kotav’ (I write, a writer), ‘katoov’ (written), ‘kitav’ (letters, script), and even ‘kitovet’ (address), ‘kitoobah’ (marriage certificate), ‘katban’ (scribe). In practice, various additional signs have been used to aid the reader in pronouncing the vowels. The commonest of these is a system of dots placed above or below a letter, referred to as ‘vowel points’ or ‘matres lectionis’, Latin for ‘mothers of reading’.

Clumsy as this may appear to be, the Hebrew script (in both its forms) has always exerted a powerful appeal on the Jews. For many centuries after Christ, during the Jewish diaspora, the use of ‘square Hebrew’ was restricted largely to religious literature.

Letter name	Phonetic value	Phoenician	Modern Hebrew	Modern Arabic
aleph	ʾ	𐤀	א	ا
beth	b	𐤁	ב	ب
gimel	g	𐤂	ג	ج
daleth	d	𐤃	ד	د
he	h	𐤄	ה	ه
waw	w	𐤅	ו	و
zayin	z	𐤆	ז	ز
ḥeth	ḥ	𐤇	ח	ح
teth	ṭ	𐤈	ט	ط
yod	y	𐤉	י	ي
kaph	k	𐤊	כ	ك
lamed	l	𐤋	ל	ل
mem	m	𐤌	מ	م
nun	n	𐤍	נ	ن
samekh	s	𐤎	ס	س
ayin	ʿ	𐤏	ע	ع
pe	p	𐤐	פ	پ
sade	s	𐤑	צ	س
qoph	q	𐤒	ק	ق
reš	r	𐤓	ר	ر
šin	šb/s	𐤔	ש	ش
taw	t	𐤕	ת	ت

Modern Hebrew letters evolved from Phoenician letters via the Aramaic script, as did modern Arabic letters. There are a few resemblances to the Phoenician letters, but most of the letters are different. Note that vowels are not directly marked in Hebrew or Arabic. In due course, vowels came to be marked using three basic signs above and below the line. In Arabic, there are also extra consonants, 28 in all (not shown).

Then, during the last century, it was revived as a colloquial script. The modern Hebrew language is based on this tenaciously surviving script, reversing the normal relationship of a script being based on a language. This creation is, in the words of one scholar, ‘unprecedented . . . unique in the history of human speech’.

The Arabic Script

The Arabic script is today one of the great scripts of the world, owing to the fact that it is the sacred script of Islam. The Arabs as a people are identifiable as early as the Assyrian period (in the 9th to 7th centuries BC), but they did not become prominent historically until about the time of Christ. The first independent Arab kingdom known to us is that of the Nabataeans, centred on Petra in modern Jordan. They spoke a form of Arabic but wrote in the Aramaic script, the official administrative script of the Assyrians and Persians. The presence of certain distinctively Arabic forms and words in these Aramaic inscriptions eventually gave way to the writing of the Arabic language in



Nabataean Aramaic script. This was the precursor of the Arabic script, which arose during the first half of the first millennium AD and replaced the Aramaic script. Thus the line of descent was from the Phoenician to the Aramaic to the Nabataean to the Arabic script.

From the beginning of the Islamic period in the early 7th century AD, there appear to have been several forms of the Arabic script. In all of them there are 28 consonants instead of the 22 consonants of Aramaic, in order to represent sounds that are in the Arabic languages but not in the Aramaic language. A new ordering of the consonantal alphabet was also established, largely on the basis of the shapes of the letters (which read from right to left).

Arabic calligraphy. With the coming of Islam, the artistic spirit of the Arabs went into calligraphy and abstract decoration because of the general Muslim reluctance to paint pictures with religious imagery.

Above Detail from the Koran in Muhaqqaq script, from Baghdad, Iraq, 1304.

Left Shīah prayer in Thuluth script in the shape of a falcon, by Muhammad Fat'yab, early 19th century, Iran.

Below Seljuq gold wine bowl engraved on rim with foliated kufic script, early 11th century, Iran.



Indian Scripts



গ্যজিং রায় (প্রাডাকমন্স-এর

মূল কাহিনী

প্রভতকুমার মুখোপাধ্যায়

সংকলন

হবি বিশ্বাস। সৌমিত্র চট্টোপাধ্যায়
শিলা ঠাকুর। করুণা বন্দ্যোপাধ্যায়



মহাশয়
আলি আকবর

পরিবেশক
জনতা পিকচ
এড-সিফট
নির্মিত

The origins of the modern Indian scripts are unclear. Some Indian and a few non-Indian scholars have tried to trace a link between the undeciphered script of the Indus Valley Civilization (pp. 146–48) and the earliest Buddhist inscriptions, but since there is a gap of more than 1500 years between the two, this explanation is far-fetched. Most scholars – Indian and non-Indian – agree that the Aramaic script was the parent script of one of the earliest Indian scripts, Kharosthi, even though hard evidence of the link is lacking.

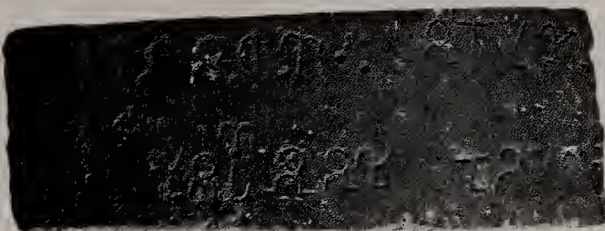
The earliest known Indian inscriptions are those of the Emperor Asoka (c. 270–c. 232 BC). They are rock edicts erected in various parts of northern India, written in two scripts, Kharosthi and Brahmi, the more important of which is Brahmi. No less than about 200 different South and Southeast Asian scripts derive, directly or indirectly, from the Brahmi script: that is nearly all the Indian scripts, leaving aside those imported into India with Islam. They include southern scripts used to write Dravidian languages, as well as the northern scripts used to write Sanskrit and its descendants.

One thing is quite clear about this early period in India: the Indians used their sophisticated knowledge of phonology and grammar to organize their alphabets differently from that of the Aramaic alphabet. The letters are classified in accordance with place of articulation in the mouth: vowels and diphthongs come first, then consonants in the following logical order: gutturals, palatals, retroflexes, dentals, labials, semi-vowels and spirants. But often it was a syllable that was represented by the Indian scripts; consonant signs that express inherent vowels, i.e. syllables, are extremely important in Indian writing systems. Thus the sign for ‘b’ in Bengali represents the sound *bo* (where the *o* is short).

Left Bengali script, a modern descendant of Brahmi script, on a film poster designed by Satyajit Ray, 1960. The title is *Devi* (The Goddess). The Bengali script uses a mixture of syllabic letters and vowels arranged in an order based on that determined by Indian phoneticians well over 2000 years ago.

Below left One of the earliest inscriptions of India on a fragment of an edict of the Emperor Asoka, inscribed in Brahmi, 3rd century BC.

Below right Two descendants of the Brahmi script, used in the south of India on a copper plate describing a grant, AD 769–70. The top lines are in Sanskrit written in Grantha script, the other lines are in Tamil written in Vatteluttu characters, slanting slightly to the left. Vatteluttu is older than the modern Tamil script (not shown here).



Runes

The vast majority of European scripts derive from the Roman letters – which has tended to obscure the existence of one significant European script, the runic script, whose links with the Roman script are less certain. From as far back as the 2nd century AD, runes have been found that were used to record the early stages of Gothic, Danish, Swedish, Norwegian, English, Frisian, Frankish and various tribal tongues of central Germania. These peoples were therefore not illiterate, as sometimes thought, before the period when they became Christian and began to use the Roman alphabet.

There was a range of runic scripts, reflecting the range of languages involved. The total number of known runic inscriptions is probably in the region of 5000, almost all of which are located in Nordic countries. The great majority are in Sweden, where discoveries of rune stones are still frequently made. Norway has over 1000 inscriptions, and Denmark some 700; Iceland has about 60, all from comparatively late times, and there are also runic texts from Greenland and the Faroes. Some of those in Britain, found in the Isle of Man and in the Orkneys, Shetlands, Ireland and Western Isles, are the work of travelling Norsemen; Anglo-Saxon England has, in addition to several issues of coins with runic legends, some 70 inscribed objects; Germany about 60; elsewhere in Europe there is a scattering of runes.

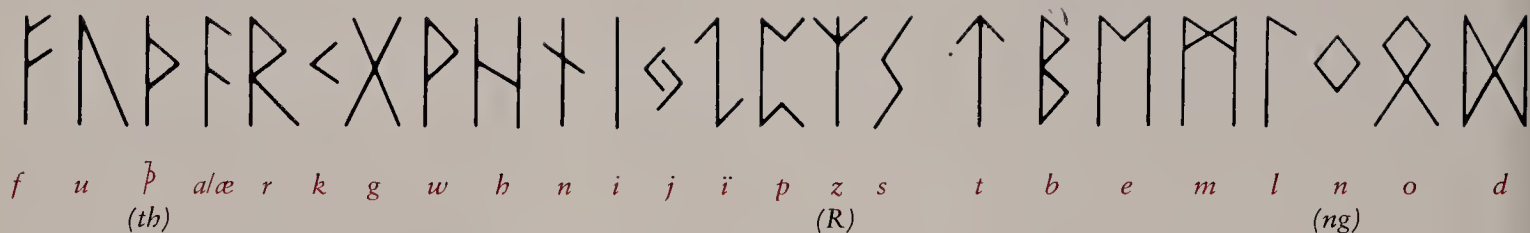
We do not know where and when runes were invented. Finds of early rune-inscribed objects in eastern Europe, at Pietroassa in Rumania, Dahmsdorf in central Germany



and Kowel in Russia, indicated that runes may have been invented in that general area, perhaps by Goths on the Danube frontier or beside the Vistula. Another hypothesis notes the resemblance between the runes and characters used in the inscriptions of the Alpine valleys of southern Switzerland and northern Italy and goes on to ascribe the invention to romanized Germani from that area. A third hypothesis prefers one of the Germanic tribes of Denmark, perhaps southern Jutland, as the progenitors of runes; many of the earliest inscriptions come from this general area, and early runic texts continue to be found in various regions of Denmark. But on one point all scholars of runes agree: the Roman alphabet exercised influence of some kind on the runic script.

Runes were used for over a thousand years among a wide variety of cultures and traditions. Note, for example, that the individually plotted findspots of runes to the south and east parallel the movements of migrating Goths c. AD 200, of Christian Anglo-Saxon pilgrims in the 8th century and of Viking adventurers of the 11th century.

Reading the Runes



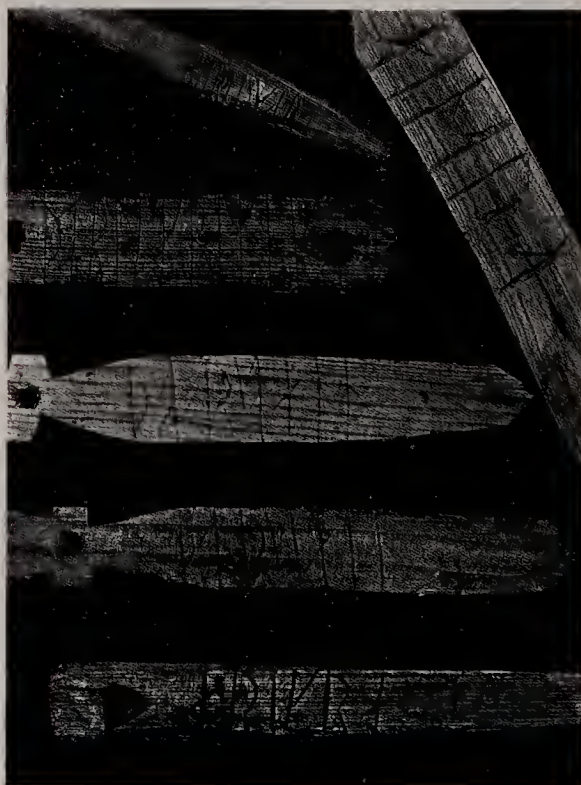
The runic alphabet has 24 letters, arranged in a peculiar order known as the ‘futhark’ after its first six letters. Here it is written from left to right, but it could be written from right to left equally well in early times, or even boustrophedon. An individual letter could also be reversed on occasions, apparently at whim, and might even be inverted. There was no distinction between capital and lower-case letters.

Some of the runic letters are obviously related to letters of the Roman alphabet, as ‘r’, ‘i’ and ‘b’. Others could well be adaptations of Roman letters, as ‘f’, ‘u’ (Roman V inverted), ‘k’ (Roman C), ‘h’, ‘s’, ‘t’, ‘l’ (Roman L inverted). But other runes, such as those representing *g*, *w*, *j*, *p*, scarcely resemble Roman forms with the same sound value.

The sound values given above are approximate: the sounds of early Germanic languages are not exactly paralleled in modern English. There is a rune, for example, for the spirant sound *th*, as in ‘thin’ (it was used in early English spelling, as we have seen on p. 171, and called ‘thorn’). There is a vowel \uparrow , represented here as *i*, the pronunciation of which is disputed. Runic script could also distinguish between *ng* in ‘ungrateful’ ($\uparrow + \chi$) and *ng* as in ‘sing’, \diamond .

But even though runic inscriptions can usually be ‘read’ – in the same sense as Etruscan inscriptions – their meaning is frequently cryptic, because of our lack of knowledge of the early Germanic languages. Hence the origin of today’s expression ‘to read the runes’ – meaning to make an educated guess on the basis of scanty and ambiguous evidence. As a scholar of runes has remarked, the First Law of Runodynamics is ‘that for every inscription there shall be as many interpretations as there are scholars working on it.’

Below **Runic merchants’ labels on wood from Bergen, western Norway, 12th century AD.** Each gives the owner’s name and would have been tied onto or stuck onto goods bought. Wood was an ideal medium, since it could be shaved if a mistake was made and burnt as kindling after use – but its easy decay means that there are no runic inscriptions surviving from early times.



Right **The Franks Casket, c. AD 700.** This panel depicts a scene showing **Wayland the Smith** (left) and the **Adoration of Christ** with the title ‘*mægi*’, i.e. *Magi*, in a tiny box above it.

The most famous of the English runic objects is probably the Franks Casket, dating to around AD 700 and named after the man who donated most of it to the British Museum. The front of the box (*below*) has scenes of Wayland the Smith (*left*) and the Adoration of Christ (*right*), above which appears the word ‘mægi’, ‘Magi’. The main inscription can be read clockwise round the box, starting at top left:

TOP LINE:
fisc. flodu | ahof on ferg
 RIGHT SIDE:
en berig
 BOTTOM LINE (read right to left):
warþ gasric grorn þær he on greut giswom
 LEFT SIDE:
hronæsban

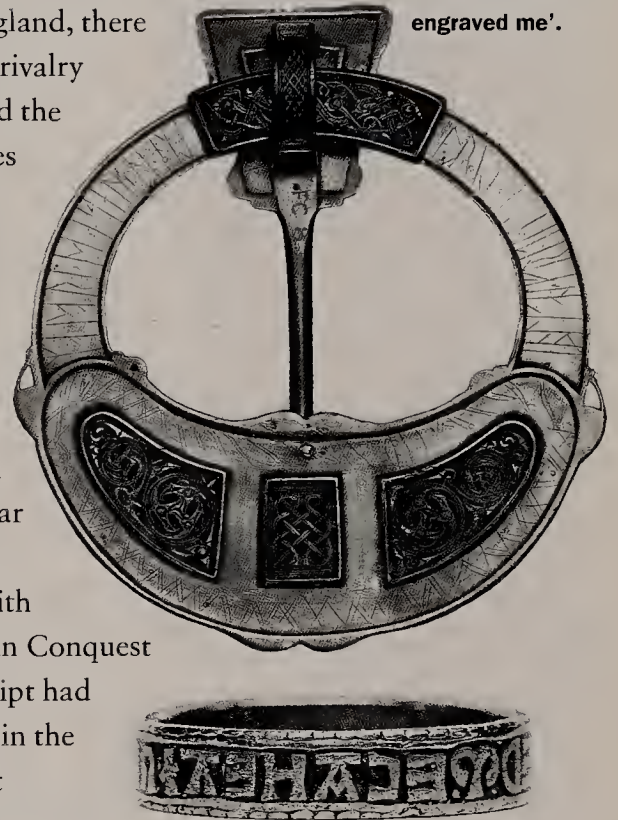
The text is a riddle about the origins of the material from which the box is made: ‘the fish beat up the seas onto the mountainous cliff; the king of the terror became sad when he swam onto the shingle’. The answer is given in the last word at the left, ‘hronæsban’ (whale’s bone): the box comes from the bone of a beached whale.

We can see that even at the time of their use, runes were considered to be esoteric signs. The brooch shown here was found in Scotland, and belonged to a Celt named *malbri þaastilk*, ‘Melbrigda’, according to the runes written to the left of the pin: those to the right of the pin, however, are just meaningless pseudo-runic decoration.

In Anglo-Saxon England, there appears to have been a rivalry between the Roman and the runic scripts. Sometimes both scripts were used on the same object, as on the gold ring from Lancashire (*below*). The rivalry had nothing to do with religion – the Christian church had no particular animus against runes – but everything to do with prestige; by the Norman Conquest in 1066, the Roman script had triumphed and in Britain the runic script had almost entirely disappeared from use.

Below **A Celtic-type brooch found at Hunterston, Scotland, with runes to the left of the pin.**

Middle **A gold finger ring of the 9th century from Lancashire, England, with the legend in a mixed runic/Roman script: ‘Ædred owns me, Eanred engraved me’.**



The Cherokee 'Alphabet'



Although the Cherokee script invented by Sequoyia in 1821 is traditionally known as an alphabet, it is really a syllabary based largely on assigning syllabic values to the individual letters of the Latin alphabet. Thus J represents the sound *gu*, and M the sound *lu*. The 85 symbols represent 6 vowels, 22 consonants, and some 200 phoneme clusters and syllables.

The 'alphabet' was learned by many Cherokees, first in North Carolina, its place of origin, and later in Oklahoma, where many of the Cherokees had emigrated after 1830. Newspapers and official documents of the Cherokee nation, and other materials, were published in the script, using type designed in Boston in 1827. Soon 90 per cent of Cherokees were literate in the script. However the system later fell into disuse – though recently there have been attempts to revive it.

Initially, Sequoyia had tried to make a character for each word, only abandoning

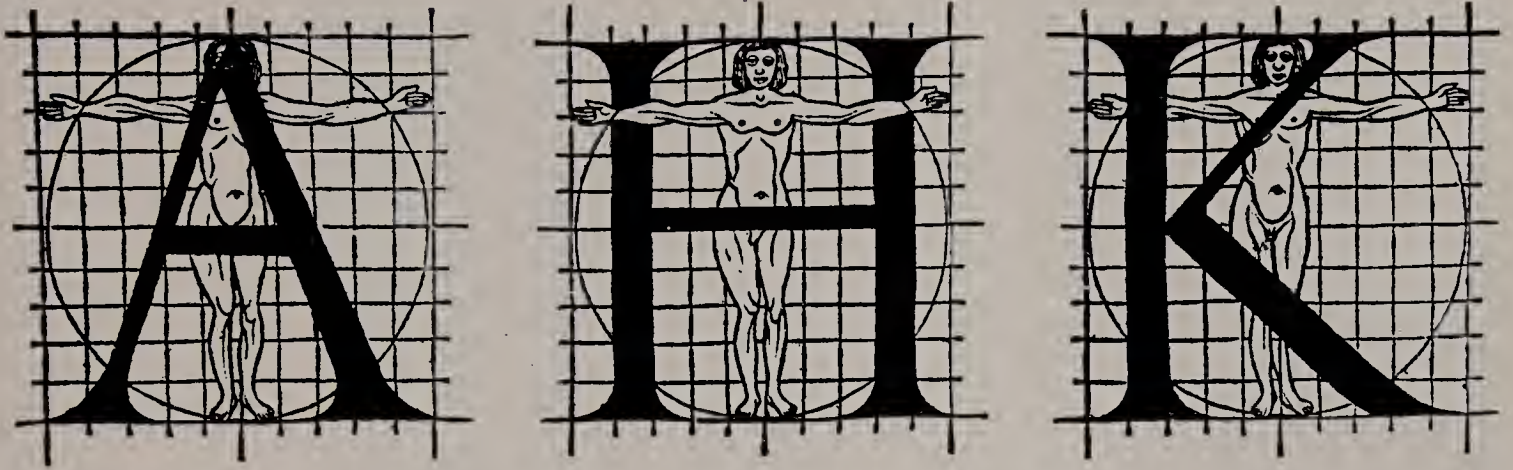
D <i>a</i>	R <i>e</i>	T <i>i</i>	Ꭰ <i>o</i>	Ꭱ <i>u</i>	Ꭲ <i>v</i>
Ꭳ <i>ga</i> Ꭴ <i>ka</i>	Ꭵ <i>ge</i>	Ꭶ <i>gi</i>	Ꭷ <i>go</i>	Ꭸ <i>gu</i>	Ꭹ <i>gv</i>
Ꭺ <i>ha</i>	Ꭻ <i>he</i>	Ꭼ <i>hi</i>	Ꭽ <i>ho</i>	Ꭾ <i>hu</i>	Ꭿ <i>hv</i>
Ꮀ <i>la</i>	Ꮁ <i>le</i>	Ꮂ <i>li</i>	Ꮃ <i>lo</i>	Ꮄ <i>lu</i>	Ꮅ <i>lv</i>
Ꮆ <i>ma</i>	Ꮇ <i>me</i>	Ꮈ <i>mi</i>	Ꮉ <i>mo</i>	Ꮊ <i>mu</i>	
Ꮋ <i>na</i> Ꮌ <i>nd</i> Ꮍ <i>nah</i>	Ꮎ <i>ne</i>	Ꮏ <i>ni</i>	Ꮐ <i>no</i>	Ꮑ <i>nu</i>	Ꮒ <i>nv</i>
Ꮓ <i>qua</i>	Ꮔ <i>que</i>	Ꮕ <i>qui</i>	Ꮖ <i>quo</i>	Ꮗ <i>quu</i>	Ꮘ <i>quv</i>
Ꮙ <i>sa</i> Ꮚ <i>s</i>	Ꮛ <i>se</i>	Ꮜ <i>si</i>	Ꮝ <i>so</i>	Ꮞ <i>su</i>	Ꮟ <i>sv</i>
Ꮠ <i>da</i> Ꮡ <i>ta</i>	Ꮢ <i>de</i> Ꮣ <i>te</i>	Ꮤ <i>di</i> Ꮥ <i>ti</i>	Ꮦ <i>do</i>	Ꮧ <i>du</i>	Ꮨ <i>dv</i>
Ꮩ <i>da</i> Ꮪ <i>da</i>	Ꮫ <i>te</i>	Ꮬ <i>ti</i>	Ꮭ <i>to</i>	Ꮮ <i>tu</i>	Ꮯ <i>tv</i>
Ꮰ <i>sa</i>	Ꮱ <i>se</i>	Ꮲ <i>si</i>	Ꮳ <i>so</i>	Ꮴ <i>su</i>	Ꮵ <i>sv</i>
Ꮶ <i>wa</i>	Ꮷ <i>we</i>	Ꮸ <i>wi</i>	Ꮹ <i>wo</i>	Ꮺ <i>wu</i>	Ꮻ <i>wv</i>
Ꮼ <i>ya</i>	Ꮽ <i>ye</i>	Ꮾ <i>yi</i>	Ꮿ <i>yo</i>	Ᏸ <i>yu</i>	Ᏹ <i>yv</i>

this approach after about a year when he had put down several thousand characters. Then he hit upon the idea of dividing words into parts of syllables. Since he lacked confidence in his ability to discriminate sounds, he called upon the help of his wife and children, whose more acute ears helped him finally to arrive at all the sounds of their language. Once he had established these, Sequoyia set about devising symbols with the aid of an English spelling book. He compiled 200 symbols, which he then reduced to a total of 85.

Cherokee 'Alphabet'.

Left Cherokee Sequoyia (c. 1760–1843) explains his 'alphabet'. The portrait is a contemporary one by Charles Bird King. Sequoyia knew no English but he had contact with American settlers and was determined to emulate the achievement of their writing system, so as to create a Cherokee equivalent of the white man's 'talking leaves'.

The Mystique of the Alphabet



It is often said that the alphabet was necessary for the growth of democracy, because it enabled very many people to become literate. Others claim that the West's triumph in the modern world, particularly in science, is largely the result of a so-called Alphabet Effect. They contrast the West with China: while both West and East developed science, they note, the West went on to develop the analytical thinking of, say, a Newton or Einstein, and left China far behind, because these thinkers were nurtured on the letter-by-letter principle (inherent in the alphabet). Put at its crudest, alphabets are alleged to promote reductionist thinking, Chinese characters holistic thinking.

The first suggestion, about democracy and the alphabet, has a kernel of truth. But did the alphabet help democracy to grow, or did a nascent desire for democracy give rise to the alphabet? (Of course, if one believes that the writing down of Homer was the spur, then the Greek alphabet appears to have had a supremely aristocratic conception!) The ancient Egyptians had access to an alphabet without vowel signs as early as the 3rd millennium BC. Instead of using it,

they chose to write in hieroglyphs using multiple signs: perhaps they felt no urge for democracy in their political system?

The second suggestion, about science, appealing as it is, is a fallacy. It is quite conceivable that the Chinese writing system, by its enormous complexity, retarded the spread of literacy – but it is ludicrous to connect a deep cultural trend, such as a dearth in analytical thinking, with the predominance of logograms over phonograms in Chinese writing. One might as well try to link the fact that Indo-Europeans write epic poetry with the fact that they drink milk – in contrast to the Chinese, who do neither. A distinguished sinologist has ironically dubbed this the Milk Diet Effect. For worthwhile explanations of profound cultural differences, we need to look at cultures in the round, rather than singling out one aspect such as the way a culture writes, however important that may appear. After all, if Newton and Einstein could understand gravity and relativity, they could surely have mastered an education imparted in Chinese characters – or, for that matter, in Egyptian hieroglyphs or Babylonian cuneiform.

Champfleury alphabet, 1529, designed by Geoffroy Tory (c. 1480–c. 1533). Tory, a pupil of Leonardo da Vinci and Albrecht Dürer, was appointed 'imprimeur du roi' (printer to the king) by the French monarch Francis I. Of the letter A Tory noted that it 'has its legs apart in the manner of a man's legs and feet as he strides along'. The cross-bar of the A 'precisely covers the man's genital organ, to denote that modesty and chastity above all else are required in those who seek access and admission to good letter forms, among which A is the entrance gate and first in order in all ABCs.'