The first real breakthrough came when the English physician, Thomas Young, realized that the demotic script consisted of both phonetic (which he still perceived as being alphabetic) and non-phonetic signs, and even more vital, that the hieroglyphic and the demotic scripts were interrelated. Young then turned his attention to the hieroglyphic part of the inscription, and presuming rightly that the elongated oblongs or cartouches which enclosed certain groups of signs contained royal names, he identified the correct phonetic value of six hieroglyphic signs, and read another three at least approximately correctly. Between 1814 and 1818 Young devoted a good deal of effort to the Rosetta stone, and to copies of other inscriptions he had been able to obtain from Egypt. In all he eventually succeeded in equating, either correctly or nearly correctly, over eighty demotic words with their hieroglyphic counterparts, and, with the help of Greek words, translated most of them. Young's notebooks from this period are now in the British Library (fig. 89). Young communicated the results of his investigation to the French scholar Jean François Champollion, and also published them in an article in the Supplement to the Encyclopédia Britannica in 1819. Yet Champollion, who since early youth had been obsessed by the idea of deciphering the hieroglyphs, and who had meticulously prepared himself for this task by studying Coptic and collecting all available copies of hieroglyphic, hieratic and demotic texts, clung for another two years to the belief that the hieroglyphs were symbols without phonetic value. The turning point came in 1822. Champollion had counted the signs in the hieroglyphic portion of the Rosetta stone, and discovered that they outnumbered the Greek words three to one. This meant that instead of one hieroglyph equalling one word, several hieroglyphs were obviously needed to construct a single word. Around the same time Champollion received copies of another bilingual inscription taken from an obelisk (now at Kingston Lacy, Dorset) which had been excavated by W. J. Bankes in 1815. By comparing the Greek names, which he knew how to read, with their equivalent in demotic, hieratic and hieroglyphic, he correctly identified the names of Ptolemy and Cleopatra.

In September 1822 Champollion wrote his now famous Lettre à M. Ducier relative à l'alphabet des hiéroglyphes phonétiques to the Paris Academy. In it he corrected and greatly enlarged the list of phonetic hieroglyphs drawn up by Young, and correctly deciphered the hieroglyphs in some of the names and titles of most of the Roman emperors of Egypt. Between then and his early death in 1832 he drew up a classified list of hieroglyphs, identified the names of many Egyptian kings, formulated a system of grammar and successfully read and translated a large number of texts.

The decipherment of proper names, though undoubtedly the initial key, would not have led to an understanding of the Egyptian language without the assistance of Coptic (see p.122). The Coptic vocabulary consists of Egyptian words supplemented by a considerable number of Greek loan words. Champollion had drawn extensively on his knowledge of Coptic by translating words in the Greek version into Coptic; then, comparing them with the appropriate group of hieroglyphic signs (or vice versa), he ascertained their correct meaning and, up to a point, their pronunciation. Coptic, until the 13th century the language of the Christian population of Egypt, and still used in Coptic churches, is indeed the main guide to the actual pronunciation of the ancient Egyptian language, since the phonetic part of the Egyptian script supplies only consonants (see p.62). Though much work had still to be done (by such scholars as Lepsius, Birch, Hincks, Gardiner, Rougé, Chabas, Maspero, Brugsch etc.), Champollion had without doubt provided the foundation of all further research. He had found the key to a script which had been lost and forgotten for almost 1,400 years, and by so doing initiated modern Egyptology. It is equally certain that Young had understood the basic principles two years earlier. Champollion knew this, but he never acknowledged it in print.
The cuneiform script

Until about 150 years ago the script and the languages of ancient Mesopotamia were almost completely unknown. Indeed less than 600 years after Darius (521–486 BC) had carved his inscriptions on the rockface of Behistun (the inscriptions which were to play such an important role in the decipherment of the cuneiform script), the script and the three languages he had used to ensure that his victories would be remembered by future generations had passed from use. In fact until quite recently the existence of the Sumerians (see p.65), who had originally created this form of writing, was not only forgotten but largely denied.

The reasons for this almost total disappearance (even from memory) of what had been one of the most important and influential civilizations of all time are many. There is first of all the history of Mesopotamia itself (see p.65). After some 3,000 years of change the pattern of power, with invasions accompanied by periodical devastations of the city-states, the economy — vulnerably inter-linked with irrigation — finally collapsed, and the cities, the people and the civilization they had created, vanished. There is also the question of basic raw material. In Egypt it had been stone. Consequently, even after the art of writing in the Egyptian language had passed from memory, innumerable hieroglyphic inscriptions remained clearly visible on the walls of temples, inside funeral chambers, on obelisks and pyramids. Their meaning may have become incomprehensible but they themselves could not be forgotten. In Mesopotamia the basic raw material had been clay, a much less spectacular and, at least to some extent, less stable material. Thus in the course of centuries the once-splendid cities vanished under ever-growing mounds of rubble, until eventually even their location was forgotten. And then, most of what was known about Mesopotamia, and especially about Babylon, came from a hostile source, namely the Bible.

The second half of the 18th century witnessed a great upsurge in travel and exploration. The literary output of men such as Voltaire, and the effect of the French and American revolutions were stimulating a spirit of (religiously) unbiased curiosity. Very many of the travelers who came to the Middle East — diplomats, soldiers and political agents — possessed intellectual brilliance coupled with remarkable physical courage. Often at their own expense, nearly always at the expense of their health, they excavated the various mounds which lay between the two great rivers, Euphrates and Tigris. At first the many undeciphered inscribed bricks, the remains of once-famous libraries, aroused little interest. The 'excavators' and their public back home were captivated by more spectacular discoveries: monumental winged lions, man-headed bulls and the large battle friezes, now to be seen in places such as the Louvre or the British Museum. Unlike the Egyptian hieroglyphs, the cuneiform script is physically undistinguished, and to begin with doubts were expressed as to whether the wedge-shaped signs were indeed writing or just some form of ornamentation. There was in addition the sheer volume of inscribed bricks. In 1771 the Abbé de Beauchamp wrote that there were 'too many of them for any of them to have any particular value'. Even after the cuneiform script as such had been recognized there was simply no known language to which this script could be related, and early speculations varied between Hebrew, Greek, Latin, Chinese, Egyptian and the Ogham script of the British Isles.

From among the many scholars who contributed to the decipherment of the cuneiform script (and the re-discovery of the languages that this script had served) the greatest name is that of Sir Henry Rawlinson, the co-painter and translator of the inscription of Darius on the rock of Behistun. The Behistun inscription consists of ten columns of cuneiform text written in Old Persian, Elamite and Babylonian, and it is placed 190 metres above ground level on the surface of an almost sheer rock which rises to a height of 1,200 metres. It is difficult to reach the inscriptions from either above or below, since the platform that the Persian workmen must have used has since been cut away, except for a short ledge half a metre wide below one of the inscriptions. Only an exceptionally experienced and daring mountain climber can hope to reach the inscription; to copy it needs almost suicidal dedication. In the event Rawlinson used ladders of varying length, precariously balanced on the narrow ledge, and by steadying his body and the ladder against the rock with his left arm and holding his notebook in the palm of his left hand he was able to copy the text with his right hand. According to his own account 'the interest of the occupation entirely did away with any sense of danger'.

Between 1800 and 1857 a large number of scholars, and some gifted amateurs, worked diligently on the decipherment of the cuneiform script and the reconstruction of the languages of ancient Mesopotamia. Early on, when the Babylonian language was still largely unknown, Joseph Hager published a small book on the 'newly discovered Babylonian inscriptions' in which he made certain already basically correct observations, namely: (1) that the 'nail-headed' signs were real characters, and not ornaments, as previous scholars had supposed; (2) that these characters had been used not only in Persia but also in Babylon, whose civilization was anterior to that of Persia; and (3) that they were read horizontally from left to right.

Two intriguing figures in the long story of decipherment (and there are too many to name them all) were the German schoolmaster Georg Grotefend and the Irish parson Edward Hincks, neither of whom received quite the recognition that their work warranted. Grotefend for example had used copies of two different Old Persian inscriptions, and by treating the problem in terms of cryprology and mathematics (instead of linguistics), he had arrived at a more or less correct reading of the names of Darius and some other Persian kings. But when in 1802 the year the Rosetta stone was brought to London) Grotefend presented a paper to the Göttingen Academy, it was rejected — on the grounds that he was not an orientalist.

By 1850 the three inscriptions which Rawlinson had copied in Behistun had been more or less translated. Though most of the credit goes to Rawlinson (who had by then renounced his diplomatic career to devote himself exclusively to the task at hand) other scholars, as for example Norris, Westergaard, Sayce and Oppert, and most of all the retiring Hincks who hardly ever left his country parsonage, had made essential contributions. The decipherment of the last — the Babylonian — inscription caused a good deal of controversy, despite convincing arguments put forward by Rawlinson and Hincks. In the end this was resolved, in rather dramatic fashion, by the mathematician William Henry Fox Talbot, who sent his translation of the Tiglath-pileser cylinder (see fig. 24) to the President of the Royal Asiatic Society with the request that Rawlinson and Hincks should likewise submit their translations in sealed envelopes. The Society agreed and invited the orientalist Jules Oppert to join in the contest. The four sealed packets were opened on 29 May 1857 by two examiners who concluded that the resemblance of the passages in the different translations was 'so great as to render it unreasonable to suppose the interpretation could be arbitrary or based on uncertain grounds'.
Other scripts

Many other ancient scripts were successfully deciphered in the course of the 19th century; James Prinne, for example, deciphered the Brahmi script (see p. 106) in the years between 1834 and 1839. Several scholars worked (like Hincks) on not just one, but on several different scripts more or less simultaneously. But no other decipherments had quite the same dramatic appeal as that of the Egyptian hieroglyphs and the cuneiform script, and none brought about quite the same public interest and acclaim. In both cases the great achievement lay in the combination of contributory factors. Both scripts were not only unknown, but constructed on principles entirely different from those hitherto known and used. Western scholars were familiar with the alphabet, with consonantal and syllabic scripts; at the most, with the mixture of concept and sound writing (e.g. Chinese). They knew about the possibilities of pictography but they had not previously encountered the same intricate mixture of phonetic and pictographic elements. They had no guidelines about the direction of writing or on how the text could be divided into sentences and words. In addition those scripts were used for languages entirely unknown as far as vocabulary, grammar, syntax and structures were concerned. Nothing was known about their pronunciation or the ideas they represented, and the type of information they were meant to store. Both scripts were keys to new worlds, new civilizations, new areas of perception. In fact only one other decipherment has aroused any similar amount of interest: the decipherment of Cretan Linear B (see fig. 41) by the architect and amateur archaeologist, Michael Ventris, in 1953 (see p. 69).

Undeciphered scripts

A good number of scripts are still only partly deciphered. The reading of the hieroglyphic signs of the Meroitic scripts (see p. 65), for example, is more or less assured, but the interpretation of the inscriptions presents difficulties since their language seems to bear no relation to any known language. The decipherment of proto-Elamitic inscriptions which date from the first half of the 3rd millennium B.C. has likewise remained very much in its early stages. In the same way, while the cuneiform script of the Hittites was deciphered by the Czech Assyriologist Hrozny in 1915/16, the picture script presents a large number of uncertainties. Sayce made some rather fanciful attempts at a decipherment as early as 1880, and several scholars, including Hrozny himself, have in the meantime tried their skill, but a true understanding is still a good way off. There have been speculations about the possible (phonetic) script value of the quipus used by the Incas of Peru, as well as that of signs displayed on some of their textiles and drinking vessels (see p. 79) but, despite some claims to the contrary, no proper reading has been made. The same holds true for the signs painted on beads used by the Moche people (see p. 78). Claims have been made for the decipherment of the Tangut script of North-west China (see p. 87) but they have not yet been fully substantiated; and the same can be said about the script of the Moso, Lolo, and of Old Hungarian (11, p. 427).

While these and similar problems are likely to interest just a small group of specialists, there are three scripts which continue to attract a good deal of attention, speculation and, in part, controversy. They are the still undeciphered scripts of ancient Crete, pre-Columbian Central America and prehistoric India.

Scripts of ancient Crete

Ever since Sir Arthur Evans discovered and excavated the palace of Knossos at the beginning of this century, the ancient civilization of Crete has greatly stimulated the imagination of scholars and laymen. It is perhaps not without interest to note that Evans himself had originally become interested in Crete after examining a number of inscriptions (discovered in the 1880s) which were written mainly on stone, in what was obviously a non-Greek script. So far only one of the three Cretan scripts, Linear B, which was used not for the (still unknown) Minoan language, but for a contemporary form of Greek, has been deciphered. The earliest script, a distinctly pictorial (though not necessarily pictographic) form of writing, described at times as a series of ideograms representing a standard shorthand for objects listed on tablets, is still undeciphered. The same applies to Linear A, the script assumed to have evolved from those early picture signs. Both the number of signs (about 77-85) and the evidence of the (later) Linear B script point towards a syllabic script, but without a knowledge of the Minoan language and/or some substantial bilingual text, the possibilities of a decipherment are restricted.

The decipherment of Linear B, the latest Cretan script, only became possible after Michael Ventris recognized that it must have been used for writing the Greek language.
This brilliant deduction was to no small extent influenced by the fact that tablets inscribed with short texts in Linear B have been found not only at Knossos but also on the Greek mainland, in places such as Pylus, Messina and Mycenae.

In 1908 the so-called Phaistos disc (fig. 90), one of the most puzzling objects ever discovered, was found in an outbuilding of the Minoan palace at Hagia Triada. The disc, 160 millimetres in diameter, and dated not later than 1700 BC, because of some tablets of that date found next to it, is inscribed on both sides. 'Inscribed' is perhaps not the right word: a text, arranged in bands spiralling towards the centre, has been impressed with forty-five different wooden or metal punches into the originally soft clay. There are altogether 242 signs arranged in groups (words?) divided by vertical lines. Nothing similar has ever been found in Cretan — or indeed anywhere else. The method of impressing the signs by means of specially prepared matrices (practically a form of printing with movable type) has apparently never been repeated, and it seems strange that such matrices should have been cut solely for the purpose of producing one single inscription or

imprint. The signs themselves are clearly recognizable pictures of human beings, parts of the human body, objects, houses and plants. They bear no resemblance to the ancient pictorial script of Crete or indeed to any other hieroglyphic form of writing; indeed arguments for a foreign origin have been put forward. Because of the number of different signs used in the text (forty-five), it has generally been assumed that the script was syllabic in character, but without any knowledge of the language, or the possibility of a comparison with other texts (which may well contain additional signs), this assumption does not really lead much further.

Decipherment of an unknown script is generally considered possible if either the script or the language is known, or if there is available some supplementary information in the form of bilingual inscriptions such as the one found on the Rosetta stone. This theory seems to be borne out in the case of the Cretan scripts: the decipherment of Linear B became possible after the language of the text had been recognized as Greek. Linear A, the script on the Phaistos disc, and the early hieroglyphic script have (despite all efforts) remained undeciphered, since nothing is known about the language for which they were used, and no substantial bilingual texts have so far come to light.

There are however exceptions to the theory. For example, despite the relative ease with which we can read the Etruscan inscriptions (our own Roman alphabet having largely been derived from an earlier Etruscan one), even despite internal evidence (the repetitive nature of the Etruscan alphabet and the ability to decipher names — which provided a vital breakthrough in the case of Egyptian, Old Persian and indeed a large number of other languages), it has not been possible to reconstruct or even adequately classify the Etruscan language. In other words, we can read the inscriptions but we cannot really understand them, nor can we use the information gained to build up a comprehensive picture of the language itself.

The Maya glyphs

Equally at odds with the above theory is the failure to decipher, completely, the writing of the Maya of Central America — despite the fact that the language expressed by the glyphs is still (subject to some time-shifts) spoken today, and that efforts at decipherment have been made ever since the 16th century when the script was first discovered.

The first attempt at a decipherment of the Maya glyphs was made by Diego de Landa, a Franciscan who reached Yucatan in 1549. Landa, who eventually became Bishop of Yucatan, showed (for the 16th century) a rare interest in native culture. He collected a vast amount of information on Maya religion, history, customs, everyday life, the Mayan calendar, which he recorded, together with drawings of the day-signs and copies of inscriptions found at ceremonial centres, in a lengthy manuscript entitled Relación de las cosas de Yucatán. This manuscript, which also contained his decipherment of the Maya script, disappeared but was later found again and a (perhaps abbreviated) version was published just over a century ago.

On the surface Landa should have been ideally suited for the task, but a number of unavoidable prejudices (Landa perceived the Maya script as alphabetic, shortcomings (he seems to have been somewhat tone deaf) and misunderstandings (his informants apparently thought he was asking for the equivalent of the Spanish name of the letters, not their sound values) led him astray. Thus for A (pronounced 'ah') his informant drew the head of a turtle, as in the Mayan language; for B (pronounced 'bay') a foot, the Maya symbol for travel and roads; for C (pronounced 'sek') a truncated form of the month sign zib; for X (pronounced 'say') the head of a vomiting man, since xe means 'to vomit', and so forth.
Over the years the Maya system of writing has attracted a good many would-be decipherers. In 1933 and 1952 the linguist Whorf and a Russian, Yuri Knorosov, respectively, tried to read the glyphs phonetically, giving them a predominantly syllabic value (that is, consonant plus vowel or vowel plus consonant); but both failed. J. E. S. Thompson, who has done much valuable work in identifying and interpreting glyphs, doubts whether a full and unchallenged decipherment will ever be possible. The reasons he cites are fairly convincing: the varying ways in which so many glyphs could be used, the way the reading of the texts depended on the interpreting priests, and last but not least the failure of the early Spanish word collectors to include religious terms in their dictionaries (JST, p.63). Altogether the Maya system seems to consist of about 350 main signs, 370 affixes and about 100 portrait glyphs, mainly of deities; but those glyphic elements are combined to form far more numerous compounds. In addition, the Mayas ingeniously utilized ideograms, pictograms, synoynms and, above all, the system of rebus writing.

The Indus script

Until 1921/22, when the remains of urban settlements were first discovered in the Indus region, nothing was known about the civilization that flourished in the north-west of the Indian sub-continent some four to five millennia ago. Even Indian literature, noted for its antiquity, contained no valid reference to it. Now, sixty years later, after extensive excavations, much research, speculation and some controversy, we know a good deal about the material (and by inference the socio-religious) aspect of the Indus Valley, or Harappan, civilization (see p.67) but still lack conclusive evidence about the ethnic affinities of the population, the language they spoke, and, despite much effort and several claims to the contrary, we still cannot read the script.

Put briefly, the Indus script seems to consist of some 400 different signs — though it is doubtful that all of them were in regular use. It is generally assumed that the direction of writing was right to left: the majority of inscriptions start at the right-hand side with empty spaces, if any, at the left end of the line. Most of the inscriptions are on seals. There are no long texts (the average inscription numbers five to seven signs, the longest about twenty) and there are no bi-lingual ones. The majority of signs are pictorial, much in the manner of other contemporary scripts (Sumerian, Egyptian, Cretan) but there seems to have been no development towards more cursive forms (as in Egypt) or towards greater abstraction (as in the case of the cuneiform script). Whether there did exist lengthy texts on palm leaf or, as has been suggested, wax, cannot be ascertained; just as on the basis of existing evidence we do not really know whether the script served mainly administrative and commercial needs, or whether (or how far) it had a place in religion and ritual. Nor can we do more than speculate about the nature and extent of phonetic elements.

Ever since the Indus script was first discovered, it has attracted a great deal of attention. Scholars have linked it variously with the Minoan or Sumerian script, the Hittite script (and language), Sanskrit, proto-Draavidian (the common ancestor of the contemporary languages of South India), or, because of similarities in the appearance of certain signs, with a form of writing found on Easter Island (fig. 91) in the Pacific Ocean. Over the last thirty years or so the Indus script has assumed political connotations, and scholars (especially those from the sub-continent itself) are inclined to favour either Sanskrit (highly improbable) or Dravidian (possible though difficult to prove) connections depending on their own affiliations. Each year books or articles appear proclaiming decipherment, but none of the theories so far advanced has been totally convincing. Nearly all founder on the time factor — the long hiatus between the extinction of the Indus Valley civilization (c. 1600 bc) and the first evidence of an apparently Semitic-inspired Indian script (3rd century bc). In the same way, some 2,000 years would separate the unknown language of the Indus people from the first recorded evidence of a Dravidian tongue. Thus speculations — such as those put forward by the so-called Finnish Team in the 1960s — which identify, for example, the picture of a man carrying a yoke with the plural suffix (ka in modern Dravidian languages from kālai — bamboo pole, kāli — collection, bundle) look seductively convincing, but are based on the linguistically untenable assumption that the language itself remained practically unchanged for over three millennia. Connections with Sanskrit are equally far-fetched. Sanskrit did not yet exist at the time when the Indus Valley civilization flourished, nor were the Indo-Aryans (who later used Sanskrit) anywhere near the area in question. So far as the Easter Island script is concerned, three millennia and a vast geographical distance separate the two civilizations. It is true that the similarity of some of the signs is indeed startling, but graphic similarities alone are never conclusive. Most pictorial/pictographic scripts contain signs which look alike; the possibilities of representing a man, a fish, a star, the sun, the eye, a tree, and so forth are distinctly limited. It is in fact just as likely that the language of the Indus people disappeared together with their civilization, as happened in the case of the Minoans, the Sumerian and indeed several other languages and scripts.

91 He Loukou rongeorga, a ‘speaking wood’ or ‘tree board’ from Easter Island. According to local tradition king Hina Manu (c. 1100–1200 AD) brought this script with him by ship; despite recent claims to the contrary it is still basically undeciphered. (British Museum; Museum of Mankind, 92/65)
IV Social attitudes to writing and literacy
The position of the scribe in society

Ancient Egypt and Mesopotamia saw the heyday of the scribal profession, for the contribution of the scribe was essential to the economic and political survival of society. In addition the system of writing was complex, warranting a high level of skill only to be acquired through lengthy studies. Enjoying a high social status, the profession was able to attract recruits from the wealthy and privileged classes, which added further prestige. It was also to some extent a hereditary profession; both societies preferred a son to follow in the footsteps of his father. In Mesopotamia all parents were in theory encouraged to see that their children knew how to read and write, but in practice only a few were in a position to do so. Descriptions of Sumerian scribal schools dating from the first quarter of the 2nd millennium BC speak of the sons of governors, senior civil servants, scribes, and priests as pupils, and, occasionally, of a poor boy or orphan who had been adopted by a wealthy man.

Egyptian scribes led privileged lives and considered themselves superior to other men. They seem to have been exempt from taxation and, equally important in a country where at least in theory everybody could be called upon to perform manual labour, they were not expected to work outside their profession. ('Put writing in your heart that you protect yourself from hard labour of any kind', writes an Egyptian from the period of the New Kingdom.) The divine model of the royal scribe was Thoth (see Plate V), the ibis-headed scribe of the gods—and, according to myth, the inventor of writing. Either as priests or civil servants, scribes wielded considerable power and influence, and even high officials had themselves depicted as scribes in their votive or funerary statuary. Wall-paintings, illustrations on papyri or statues show the scribe either standing (see Toth), half-kneeling or, more often than not, in a squatting position, the partly unrolled papyrus ready for writing placed on top of his tightly-stretched kilt (see fig. 34), with the scribal palette (fig. 92), his badge of office, either at hand or hanging over his shoulder.

Proficiency in the art of writing was not easily acquired. Pupils spent a good number of years in strictly disciplined scribal schools, at first only copying texts and styles of writing, before being finally allowed to develop their own style. In addition they were often made to learn accountancy, assessment of taxes, mathematics, the composition of letters and other auxiliary accomplishments. Trade, economics, data relating to the agricultural year, coordination and control of the labour force digging the all-important irrigation canals, the organization of essential festivals and events—in fact the whole and vital interaction between the Palace, the Temple and the people—depended on the efficiency of a vast army of scribes. Mesopotamian scribes accompanied military expeditions, writing dispatches and accounts, acting as quarter-masters for the issuing of rations and equipment, recording booty and counting the slain enemies. Bas-reliefs often depict a pair of scribes (see fig. 35), one bearded, inscribing a clay tablet or ivory board with a coating of wax, the other clean-shaven, writing or perhaps drawing (the scenes on the bas-reliefs have the detailed accuracy of a visual eye-witness account) on what may either be a papyrus or a leather scroll.

Since privilege fed on exclusiveness and the preservation of the status quo, scribes were a highly conservative force in both Egypt and Mesopotamia. It was after all not in their interest to simplify the system of writing and make the profession accessible to a wider spectrum of society, or worse, create a situation where society no longer depended on professional scribes. In Egypt three different styles of writing (hieroglyphic, hieratic and demotic) developed in the course of three millennia (see p.60), but the script itself remained basically unchanged, maintaining the same complex interplay of phonetic and ideographic elements, despite the fact that the concept of phonetic writing, even the use of (only twenty-four) single consonant signs, was clearly understood from an early date onwards. In the same way, as long as the socio-economic system did not change, the cuneiform script of Mesopotamia became, if anything, more complex after it had been taken over by the Semitic-speaking Akkadians.
Among the Aztecs of Mexico the knowledge of writing was largely in the hands of the priests (and those trained by them) who were responsible for keeping written records of all essential festivals and occasions—such as the much feared end of each calendric cycle which, if proper rituals were not observed, could mean the end of the known world. They also recorded historical events (ensuring the identity of the group); genealogy (essential for placing each individual in correct chronological order within society); tribute paid to the king and the Temple (one of the mainstays of the economy), legal trials, and other information vital to the continuation of society. Since the highly-developed picture script with its sprinkling of phonetic elements used for the sounds was unintelligible without the special knowledge that the priests alone possessed, their position and power was, if anything, even more assured than that of the Egyptian and Mesopotamian scribes.

Aztec writing acted to some extent as a form of memory aid. Memory aids, or mnemonic devices, represent an important transitional stage between oral and literary traditions (see p. 25). Even the Brahmins of India, hostile to writing, had 'mental' memory aids to safeguard the correct recitation of the sacred hymns. In tribal societies memory aids are mostly in the hands of priests who have the necessary, often orally transmitted, knowledge to interpret them for the benefit of the rest of society. Thus the priest becomes the interpreter between the deities and the people, between profane and sacred knowledge; and it is very often left to his discretion how much of this knowledge he reveals to whom. Many memory aids can be read in different ways on different occasions in front of a different audience.

It would however be wrong to think that the existence of scribe-priests or even scribe-civil servants automatically meant a high level of privilege and material advantage for each member of the scribal profession. Once the unity between Palace and Temple disintegrates, and the economy moves in the direction of non-stratified individual enterprise, the situation changes and the position of the scribe often deteriorates. In other words, instead of depending on the scribe, society begins to use him. If in addition a complex system of writing, mixing elements of sound and idea transmission, is replaced by a simpler (democratically usable) phonetic script which, at least in theory, is well within the intellectual grasp of the majority of people, the professional scribe can become a mere secretary, a servant or even a slave.

Scribes in the service of religious communities did not always fare much better. Among the Israelites the position of the scribe was at first largely influenced by Akkadim and Egyptian models. Scribes learned their profession in family-like guilds (fig. 93) and, according to their competence, were attached to government and Temple offices where they enjoyed considerable influence. The highest post was that of the royal scribe, who fulfilled an advisory capacity and in addition seems to have been in charge of financial matters. There were also independent scribes who either served the public (to draw up documents, write letters etc.) or who were employed by persons of means very much in the capacity of personal secretaries. In Judaism scribes became professional experts for writing the Torah scroll. Theoretically every Jew was supposed to write a Torah scroll for himself, but high level of technical skill necessary for such a task made it more practical to commission a professional scribe instead. Professional scribes were indeed indispensable to the Jewish community; in fact, the Talmud advises scholars not to dwell in a town where there are no scribes. Yet during the Talmudic period, scribes were very poorly paid on the
grounds that should they become rich they would desert their vocation! Strict rules laid down in a special compendium for scribes (Tahlil Safiratun) governed the writing of the Torah scroll. The scribe was not allowed to write from memory but had to copy the text from a written model; before beginning his work he had to take a ritual bath and specially prepare himself so that he would be able to write the name of God in a state of perfect devotion and ritual purity. Scribes also acted as recording clerks and court secretaries, with the understanding that the party which derived greater benefit from a case would pay the scribe (perhaps not always an altogether satisfactory arrangement!). Religion and commerce were essential to the Jewish community; neither could function without an extensive use of writing. But writing itself was no longer a secret lore only to be acquired after years of study. Theoretically it was within the reach of a wide section of society, who in turn could afford to leave the task to a professional scribe if necessary. In other words, the power was no longer in the hands of the specialist but in the hands of those who could afford to commission the specialist.

Islam greatly respected the scribe (fig. 94), especially the scribe who was also a skilled calligrapher and who devoted himself to the writing of the Koran. The first words the archangel Gabriel spoke to the Prophet in the cave of Hira near Mecca were 'Recite! In the name of the Lord who created all things. He has taught us that which we know not.' (Koran, xcv, 1–5).

Before the coming of Islam the Arabs had mostly been illiterate nomads who relied for the preservation of their literature on oral tradition. At first the Koran was similarly transmitted, but when after 633 AD a large number of Huffaz (men who memorize and recite the Koran) were killed in the battles which followed the Prophet's death, the alarmed Muslim community turned to writing as a more reliable medium of information storage. Writing and Islam became a powerful combination, facilitating the unification of the Arab tribes, the conquest of a large part of the known world and the perpetuation of the new faith. In this context the scribe, especially the calligrapher, was no mere servant or artisan, but a man in harmony with the will and purpose of God. The names of famous calligraphers have been carefully preserved for posterity; often they were persons of high social standing — princes, scholars, statesmen, even Caliphs.

Hinduism on the other hand has never shown much respect either for writing or for the scribal profession. Since the central Jewish, Christian and Islamic texts are directly related to the word of God, the (publicly verifiable) accuracy of the written word was, quite early on, considered preferable to oral tradition, just as the multiplication of those texts aided the task of conversion. Buddhism (basically a secular creed like Communism) found itself in a similar position. It is true that up to a point Judaism is highly exclusive, insisting like Hinduism on the accident of birth, but within Jewish society all Jews are entitled to the same level of information. Exactly the opposite is true of Hinduism. There the sacred texts were originally the carefully-guarded property of certain Brahmanical sub-groups whose power and status depended on their ability to maintain this monopoly. Once a point had been reached when the texts with their innumerable commentaries and sub-commentaries had to be written down (the sheer volume of information outstripped human memory), temples and other religious institutions did of course use scribes and copyists, but whereas in Islam and Christianity it was meritorious to write the text of the Koran or the Bible, in Hinduism the merit went mostly to the person who commissioned the work. Scribes were equally necessary for the administration of the Hindu kingdoms, but since the rendering of personal service to anybody outside the family group is likely to lower one's status, scribes as a class were largely prevented from realizing a high level of social prestige. Ritual purity is one of the central themes of Hinduism; even the Brahmins who perform the essential rituals, either for the dead or in the temple, are of lower status than other Brahmins, since the execution of those rituals makes them subject to pollution through contact with unclean elements or persons. The Khayasthas, nowadays mostly business people or bureaucrats, are generally considered a scribal caste. On feast days they worship pens and pencils — something often copied by modern students. The caste status of the Khayasthas, who exist in various local sub-divisions, is widely disputed. They themselves will either claim to be Brahmins, tracing their descent from Cnagrapu, the record keeper of Yama, the god of the dead, or in certain areas they will claim affiliations with the Khatriya caste. The actual Khatriyas (the second highest caste) have long become extinct, but descent from them is frequently claimed by groups anxious to establish their credentials at the upper end of the social scale. Most authorities look upon the Khayasthas as Shudras (the lowest caste), at best 'clean Shudras'. In India popular consensus often argues that the Khayasthas had originally been Brahmins, but had lost their caste by serving as scribes for the Muslim administration.

In Mycenaean Greece, split into a number of small but heavily-administered districts, the scribal class which served the Great Warrior Leaders based its position (like the script they used) largely on Cretan models. After 1300 BC the disruption of international trade by sea raiders and pirates, with the resultant loss of the most vital export markets, initiated a slow but irreversible disintegration of the commercial empire. By the end of the
millennium most of Greece had been overrun by Dorian invaders who knew nothing of, and indeed had no use for, large palace bureaucracies. The old scribal tradition and the socio-economic pattern of society, which had for so long placed the scribe in the essential position of interpreter and coordinator, became obsolete.

Greek democracy was a new experiment in human history. After the Dark Ages came a sudden acceleration of cultural, political and intellectual interest. The re-introduction of writing after a period of illiteracy, with the adoption of the Phoenician consonant script, soon to be transformed into the alphabet, was one of the by-products of a revitalized sea trade. Dörtinger has called the alphabet a 'democratic' script, as opposed to the 'theocratic' script of ancient Egypt. But the reason why this particular form of writing was adopted at precisely this point and why, unlike the two previous attempts at writing the Greek language — Cretan Linear B and the Cyproite script (see pp.69/70) — this particular adoption proved successful, lay in the fact that Greek society was reaching a stage where it was in need of a 'democratic' form of writing. Under the Athenian democracy citizens were actively involved in the affairs of state. The machinery of government depended not on scribal coordinators but on the contribution of all free men. Private citizens participated in legislation and day-to-day administration, performing duties that would today be undertaken by permanent civil servants, and in ancient societies by professional scribes. Records of their reports were made public in the form of inscriptions. Inscriptions played an important role in ancient Greece; they often served the purpose of today's printed documents or newspaper announcements, disseminating and recording information which enabled citizens to participate in government. In Athens temporary notices, such as drafts of proposed legislation or lists of men required for military service, were written on boards and displayed in the civic centre. The spread of democracy relied on the spread of literacy. Even as ostracism (banish) an undeserving person from Athens for ten years was only possible if 6,000 men each wrote his name, simultaneously, on individual pieces of ostraka (postcards). Writing, far from being a (semi-) secret art practised by a specially trained elite, was an essential element of Greek democracy. The Greek word for 'element' was in fact the same as that for 'letter of the alphabet', and Plato compares the first basic principles of his philosophy with the child's first contact with the alphabet.

Though writing and literacy were considered important in Imperial Rome, the position of the scribe was often ambivalent. Indeed in many cases he would be a slave (or at best a freedman), and — as one discovers if one examines the forms of recorded names — often a slave of Greek origin.

This however does not mean that the free citizens of Rome were indifferent to writing and literacy. Many of them, especially those belonging to the great and wealthy families, were well versed in Latin and Greek, and quite early on a number of formal and informal styles arose to accommodate the differing needs of business, administration and ceremony. The Latin language and the Roman alphabet were brought by Roman legionaries and imperial officials to Western Europe (which had no writing system of its own) and to the rest of the vast Empire (much of it already under Hellenistic influence). The Empire itself, which at times reached from Britain to the Euphrates, depended for its survival on the effective use of written communication, but though writing was absolutely essential in the Roman world, scribes were never accorded the status they had enjoyed in Egypt and Mesopotamia. The Roman Empire was based on conquest and secular ambition, not on the (usually hypocritical) desire to extend the domain of some divine agency. The scribe worked for Caesar, not for the Temple.

In 311 AD Christianity became the official religion of the Roman Empire. Whereas Roman religion had depended on outward ceremonial, Christianity possessed in the Bible (and the subsequent corpus of commentaries), the revealed word of God, and the desire to propagate it created an almost instant need for competent (and ideologically reliable) copyists. In the 5th century the Roman Empire disintegrated under an onslaught of tribal insurrections which swept throughout most of Western Europe; and in 410 AD Rome itself was sacked by the Goths. In consequence the organized and civilized way of life that had prevailed for so long came to an abrupt end and the need for common literacy decreased. It may well have become extinct altogether without the Christian Church — which took over the mantle of Rome, creating a new empire which once again united the interests of the Temple and the Palaces.

During the 7th and 8th centuries Christianity began to spread along the old (Roman) lines of communication, taking with it the Bible, the vellum codex, the quill pen and the current forms of writing which soon expanded into a number of new and important stylistic variations (see p.167). In this new context the scribe was once more of the utmost importance. All the large monasteries in Ireland, Britain and on the Continent had their special scriptoria where dedicated and gifted monks worked as scribes (see fig. 36), illuminators and bookbinders. Their status within the monastic community could be high: St Columba (521–597), the founder of Iona, was much praised for his activities as a scribe, and Eadfrith, who wrote the famous Lindisfarne Gospels (see Plate VI), became Bishop of Lindisfarne, in 698 AD. Much of the work, especially the copying of illuminated texts, was team-work — for practical reasons and as a guard against pride and vanity. The hours were long (every daylight hour was a working one); the work itself was arduous, especially during the winter months when, sometimes, the completion of a text had to be postponed until the onset of the warmer weather.

As soon as the political situation became again more stabilized in Western Europe, government and administration once more developed a need for the clerical skills, which was to begin with were inevitably provided by the Church in the shape of the cleric or clerk. As in ancient Mesopotamia (Ashurbanipal had been the first Babylonian king to master the 'clerical skills') the ruling classes were often illiterate. Charlemagne (d. 814), whose name will always be associated with one of the finest medieval scripts, the Carolingian minuscule (see p.172) and who tried hard to master the art of writing, even taking his writing tablets to bed with him, did not progress much beyond the ability to write his name; other noble personages contented themselves with the use of three crosses in place of a signature. There were of course noteworthy exceptions: Henry I of England (1068–1135) was known as Beauclerc for his proficiency in the art of writing, and, later, Maximilian I of Austria (1459–1519) not only took great interest in fine printing, but was himself an accomplished calligrapher.

As the Middle Ages progressed, economic and political life grew increasingly more complex, creating the need for a wider spread of literacy. Clerks ceased to be clerics, and administration and commerce alike made use of accomplished and trained laymen. In fact from the 12th century onward, the Church monopoly of scholarship and learning began to decline and the gradual secularization of society led to the foundation of independent universities and schools. The monastic scriptoria ceased to be the main centres of book production, and the book market increased, catering for the needs of students, scholars, and the newly wealthy merchant classes. In the towns, professional scribes set up workshops and formed themselves into guilds to protect their interests. Side by side with the traditional book hands used in the scriptorum, less formal and more cursive styles gained prominence.

The introduction of printing into 15th-century Europe brought reading and writing to a wider and more diverse audience. It also made the medieval copyist more or less obsolete.
97 The universal penman by George Ducham, 1741. Would be very, in commercial forms needed a good round business hand, an accomplishment that could only be acquired through tuition and practice. (Victoria and Albert Museum, 86.E.1907)

Promissory Notes,

A Promissory Note containing Order to indorse and pay one Precio in another, which is done by the party of the Preceding Note payable in London by the Bank of England, and directing it to be paid when the Property therein mentioned. It is unnecessary to have a Promissory Note payable to bearer counterfeit, if you are satisfied of the Note is good. And if a Note be counterfeit, it is so to you, as a Breach thereof, to prevent it from being circulated after it is paid and delivered up. If the Drawee of a Note refuses to pay it, it is good against the drawer. The delivery up of a Promissory Note is the drawer who is asked to a sufficient number of the bank and sure to be any discharge of writing a Promissory Note... Promissory Notes, and Bank Notes of our Spital House of St. John shall be used by the party of the Preceding Note upon Demand, to pay our own Banks... Etc. If a Note be made by the Bank, and in the form of that date follow.

His place was soon taken by the writing master (fig. 95) whose position in society was somewhat ambiguous: higher than that of a craftsman, not quite as high as that of a scholar. Writing masters taught their craft in schools, to private pupils, and also published their copies (fig. 96) to gain fame, recognition of their individual styles and no doubt also to increase their commercial viability. Some developed exceedingly pleasing styles, others advocated excessive ornamentation; fashion began to play a part (JPR, pp 144-148) but in the end the scribe as writing master met with the same fate as the scribe as copyist. The accelerating demands of commerce, trade and colonial administration led, especially in 18th-century England, to an ever-increasing need for clerks (fig. 97) who were able to write
Women and writing

Whilst in the rest of the world the 10th century was generally a rather bleak and precarious period, in Japan the Heian period had just reached its halfway mark, producing a highly advanced and totally original form of culture. Translation of literary works from this period such as Murasaki’s Tale of Genji and Sei Shonagon’s Pillow Book allows us glimpses of a courtly society where a small number of men and women led lives of almost unbelievable sophistication and artistic refinement. In those circles the art of writing occupied a very special place. Arthur Waley goes so far as to say that the true religion of the Heian people was the cult of calligraphy, and though this is perhaps an exaggeration, it is certainly true that the way a man or woman handled the brush was considered a far better guide to his or her breeding, sensitivity and character than what they actually wrote (or said). A fine calligraphic hand came close to being a moral virtue, and being, in the opinion of the people, a mirror of a person’s soul, it also played an essential part in the complex games of courtship which occupied so much of the leisure hours of people of Heian. Often it was the sight of a lady’s (or gentleman’s) handwriting which first gave rise to romantic speculation and a desire to meet the writer in person. Calligraphy was a powerful aphrodisiac and during the initial stages of a love affair both partners awaited the first written communication from the other with a good deal of trepidation — since an indifferent handwriting nearly always meant the end of the affair. At one point in the Tale of Genji Prince Genji receives a letter from a lady he had known in Akashi. His favourite companion, Murasaki, is consumed with anxiety, not about the contents of the letter, but about the lady’s handwriting. When she finally manages to catch a glimpse of the handwriting she at once realizes ‘that there was great depth and feeling in the penmanship. Indeed it had style that might give pause to the most distinguished ladies of the Court’, accepting sadly that it was ‘small wonder that Genji felt about the girl the way he did’. Years later Genji takes the thirteen-year-old Princess Nyosan as his official wife and again Murasaki waits anxiously for her first glimpse of the girl’s handwriting, knowing that her own future might depend on it. Genji, lying next to Murasaki, is equally filled with anticipation. But this time the handwriting turns out to be formed and childish, and both Genji and Murasaki are embarrassed that somebody of the princess’s rank could have reached this age without developing a more polished style. Tacitly Murasaki ‘pretended not to have noticed and made no comment. Genji also kept silent. If the letter had come from somebody else he would certainly have whispered something about the writing, but he felt sorry for the girl and simply said, “Well now, you see that you have nothing to worry about”’. This may give the impression that in 10th-century Japan aestheticism outweighed political and economic considerations so far as the attitude of society to writing and to those who wrote was concerned, and that at least in this sphere men and women enjoyed equal status. But appearance can be highly deceptive. The level of capriciousness and sophistication that prevailed in court circles was the prerogative of a very small and already highly privileged group. The ordinary business of writing associated with administration, religion and learning was left to men — to scholars, priests and officials who, despite a growing independence from Chinese role models (in 894 the Japanese government had decided to stop sending official embassies to China), continued to use the Chinese language and the Chinese script; in fact the Chinese language and the Chinese script remained the exclusive and highly prestigious medium for any serious writing among men. Women were largely restricted to the use of Japanese and the (phonetic) kana script (see p.86) and it was to no small extent this restriction which resulted in the remarkable growth of indigenous Japanese literature during the Heian period.
This brings us to the question of women and writing. Was the position of the Heian ladies unique? The answer must be a cautious 'yes' and 'no'.

Whenever the ability to write was associated with power and influence, women were, as a rule, excluded. There were no professional female scribes in Egypt or Mesopotamia. In Judaism and Islam the position of women was generally too low to allow them to tamper with the writing of the name of God, though this did not necessarily condemn them wholesale to illiteracy. Hinduism did. Whereas there had been female scholars, poets and even teachers during the Vedic period, once Manus and the other Brahmanical law-givers (500 B.C. - 400 A.D.) had codified the ritually unclean status of women and deprived them, among many other things, of the right to study the Vedas, learning soon became a qualification for women of ill-fame. Only Gahikas, a certain class of public women consisting of dancing girls, married women hired out by their husbands for a fee, the wives of artists and bards, dissatisfied wives and all women with meretricious yearnings(!) were taught how to read. Indeed until very recently the belief prevailed (and is still not far from the surface in rural areas) that disaster would befall the family if a woman so much as held a book or pen in her hand. Christianity on the other hand encouraged literacy among women, though not always without ulterior motives. St Ann, the patron saint of mothers, is usually portrayed teaching the Virgin Mary, her daughter, how to read from a book (fig. 99). During the Middle Ages, women of noble estate were often better versed in Latin
and other school learning than boys, whose education centred around hunting, warfare and the courtly arts. The Church was anxious to encourage this trend, hoping that a better education might make girls more suited for the religious life should their parents decide to dedicate them — appropriately endowed with worldly possessions of course — to a nunnery. Convents, especially those based on the Benedictine Rule, were often great feminist institutions where able women, freed from the drudgery of repeated childbirth and the constant supervision of men, could carve out a career for themselves as administrators, scholars or scribes. Sometimes nuns and monks worked jointly on the copying of illuminated texts. In an astronomical treatise made in Abuce in about 1154 the illuminator painted on the dedication page a portrait of himself and of the scribe, who in this case was Guita, the canoness of the nearby sister house (10, p. 70). The admiration the Heian ladies received for their proficiency in handling the brush was largely related to their erotic charms. They wrote as women, not as scribes or scholars. They also wrote, as we have seen, exclusively in Japanese and in the kana script. To write in Chinese, using Chinese characters, was considered highly unseemly, and ladies who had somehow acquired such knowledge, like Murasaki who came from a family of scholars, discreetly abstained from emphasizing this fact. But though the Heian ladies had no direct political influence they were of great importance to their families. The advantageous marriage of a daughter, if possible to an emperor, an imperial prince or a member of a distinguished family such as the Fujiwaras, greatly increased the political influence of her own family. Daughters were in many ways more useful than sons. A son, even from the most renowned family, could never hope to become an emperor, but a daughter married to an imperial prince might give birth to a future emperor. To make such a marriage possible the girl had to be well-versed in the prescribed accomplishments (music, the composition of poetry, the preparation of incense etc.), and an indifferent calligraphic hand would have quickly disqualified her, despite all other charms.

Thus the art of writing remained a mere accomplishment, designed to make women more attractive to those who ultimately controlled society — namely men. In just the same way, 700 years later, the great courtiers of the 'Floating World' were expected to be adept in music, poetry, calligraphy (fig. 100) and conversation. Patriarchal societies have usually been skilful at introducing a strict division between women meant to breed (respectable wives), who were kept as ignorant as possible, and women meant to entertain (hetairae, courtiers, dancers, actresses), who were allowed a varying modicum of skills and education. Only occasionally, as in the Heian period, did the two roles combine; and, to their everlasting credit, the Heian ladies made full use of this opportunity.

**Writing and aesthetics**

**Calligraphy**

What exactly is calligraphy? The term derives from the Greek words *prophain* (to write) and *kallos* (beautiful), but fine writing and the development of distinct styles is not in itself calligraphy. To create, or better, to achieve, true calligraphy several elements have to combine: the attitude of society to writing, the importance of the texts, definite (often mathematically-based) rules about the correct interaction between lines and space and their relationship to each other, mastery and understanding of the script, the writing material and the tools used for writing. Calligraphy is more than craftsmanship; it demands individuality, but individuality expressed within strictly prescribed boundaries. Calligraphy is to a large extent an expression of harmony, harmony as perceived by one particular civilization. The calligrapher is in harmony with his script, his tools, the text and his own cultural heritage. Only three civilizations have produced true calligraphy: the Arabs (and those who used the Arabic script), the Chinese (and those who used the Chinese script), and Western civilization, based on the Roman alphabet, Roman laws and the Christian Church.

**ARABIC CALLIGRAPHY**

Islam and the Koran played a central part in the development of Arabic calligraphy. At the time of the Prophet’s death in 632 AD the Arabs were still basically an undisciplined people. The only script in existence was rather rudimentary and distinctly lacking in elegance, and few chose to master it. Some hundred years later, by the time the Abbasid Caliphate was established in Baghdad, the Arabic script had not only been effectively reformed, but the art of calligraphy was beginning to establish itself in the Arab world. Several elements contributed to this development. There was first of all the sacred nature of the Koran itself. Since the text was a direct revelation from God, it had to be rendered not only perfectly correctly (hence the script reform), but in a manner that did visual justice to its illustrious origin. In addition Islam forbids the representation of the living form, and whereas in China painting and calligraphy became closely interrelated, among the Arabs who followed the new faith the painter had to turn himself more often than not into a scribe in order to express his vision of the world. In Islam perfect calligraphy is a manifestation of spirituality, of an inward perfection which comes from being in harmony with the will and purpose of God. There have always been strong connections between mysticism and calligraphy, and calligraphers and Sufis alike trace back their spiritual lineage to the same person, the Prophet’s cousin Ali ibn Abi Talib.

Early calligraphic styles are mainly associated with the names of certain towns, such as Mecca, Medina, Jashrah and Kufah (see p. 97). From among them Kufic (see fig. 58), a bold angular script with horizontally stretched lines, gained the widest acceptance as the most suitable script for the writing of the Koran. By the 9th century two derivations from Kufic appeared; one was Western Kufic (fig. 101) from which all the later scripts of north-west Africa and Andalusia (Spain) claim descent, the other Eastern or ‘benti’ Kufic (fig. 102).