THE ORIGINS OF THE ORDER OF THE LETTERS

David Diringer

Nowadays, in the whole civilized world alphabetization is a normal thing. Every library has a catalogue, in which the names of the authors—and the subject-matter—are ordered alphabetically, and not only according to the first letter of the name (or of the subject-matter) but also according to the second, third, fourth letter, and so on. Indeed, alphabetization dominates all lists of names, all dictionaries, encyclopaedias, and—needless to say here—all indexes.

How far back does this generally accepted convention go? In comparison with the history of mankind, and even with the cultural development of Man—itself a relatively recent event—fully developed alphabetization has been in use only from, say, yesterday. It is, of course, based upon the fixed order of the letters. But when did this letter-order come into existence? There was certainly no letter-order before the existence of the alphabet.

The alphabet is the basis of modern civilized writing, but it has not always been so. Indeed, the alphabet is the last system of writing, though the most highly developed, the most convenient, and the most easily adaptable. There is an enormous advantage, obviously, in the use of letters which represent single sounds rather than objects, or ideas, or even syllables. No sinologist knows all the 80,000 or so of the existing Chinese symbols, but it is also far from easy to master the approximately 9,000 symbols actually employed by Chinese scholars. How much simpler it is to use 22 or 24 or 26 signs only! Also, the alphabet may be passed from one language to another without great difficulty; the same alphabet is used now for English, French, Italian, German, Swedish, Dutch, Polish, Welsh, Finnish, Hungarian, and others, and has derived from the alphabets once used by the ancient Hebrews, Phoenicians, Aramaeans, Greeks, Etruscans, and Romans.

Thanks to the simplicity of the alphabet, writing has become very common; it is no longer a more or less exclusive domain of the priestly or other privileged classes, as it was in ancient Egypt or Mesopotamia or China. Education has become largely a matter of reading and writing, and is possible for all. The fact that alphabetic writing has survived with relatively little change for three and a half millennia, notwithstanding the relatively recent introduction of printing and the even more recent introduction of the typewriter, as well as the extensive use of shorthand-writing, is the best evidence of its suitability to serve the needs of the modern world. It is this simplicity, adaptability, and suitability which have secured the triumph of the alphabet over the other systems of writing.

The story of the alphabet from the end of the second millennium B.C. until today is, on the whole, not very hard to trace, though many details and the exact origins of some scripts are still uncertain. It is its pre- and proto-history that is still wrapped in obscurity. The chief problem, still partly unsolved, is that of its origin.

* The text of an address given to the Society on 25th April, 1968.
Since classical times, this problem has been a matter of serious study. The Greeks and Romans held five conflicting opinions as to who were the inventors of the alphabet: the Phoenicians, the Egyptians, the Assyrians, the Cretans, the Hebrews. In modern times, various theories, some not very different in part from those of ancient days, have been current. Each country situated in, or more or less near to, the eastern Mediterranean has been seriously regarded as a claimant to this great honour. Of all the theories, the Egyptian (with a number of variants) has enjoyed by far the most popular reception.

All these theories are based mainly on the similarity of the symbols, which in time became the letters of the alphabet. As a matter of fact, however, the great achievement in the creation of the alphabet was not the invention of the symbols—ample evidence can be adduced for the invention of alphabets by schoolchildren who already know their ABC—but the inner working principle. This in its simplicity was the production of a system in which each sound was represented by one sign and one sign only. The inventor of this system must, indeed, have been a very fine phonetician. For this achievement, simple as it now seems to us, the inventor is to be ranked among the greatest benefactors of mankind. No other people in the world has been able to develop a true alphabetic system of writing.

It was this alphabet which became the ancestor of all alphabetic scripts the world has known. Each civilization developed its own variation on the basic script, and the passage of time has made the inter-relation of some members of the same family quite unrecognizable. Thus, the Brahmi script—the great mother-script of the hundreds of Indian and Further-Indian writings—, the Korean alphabet, the Mongolian alphabets are derived from the same source as the ancient Greek and Latin, the Runic, the Hebrew, the Arabic and the Russian alphabets, although it is practically impossible for a layman to see a real resemblance between them.

When, by whom, and where was the alphabet invented? We may date the origin of the alphabet about 1800-1700 B.C., that is, about the beginning of the Hyksos period. The nationality of its inventors is unknown, but it is now generally agreed that they belonged to the North-West Semitic linguistic group (comprising the Canaanites, Early Hebrews, Phoenicians, and Aramaeans). Palestine and Syria, the geographical centre of the greater Egypto-Mesopotamian civilization, offered conditions favourable to the invention and elaboration of alphabetic writing. Moreover, the (Semitic) language spoken in this region was particularly favourable to the creation of a consonantal alphabet.

The original, North-Semitic, alphabet remained almost unaltered for many centuries. Moreover, if we ignore the external form of the letters, and consider only their phonetic value, their number, and their order, we may regard the modern Hebrew alphabet as a continuation of the original North-Semitic alphabet, created more than 3,500 years ago. The main characteristic of the North-Semitic alphabet is that it consisted of 22 letters or symbols, which correspond roughly to the first 22 letters of its offspring, the Greek alphabet. But the 22 letters expressed consonants only, though some of them came to be used as long vowels. The absence of vowel-signs has not been satisfactorily explained. One theory is that the vowels were supplied locally, the sound given varying with the different dialects; in other words, the inventors left the vowels to be supplied according to local custom. It is pertinent to note how in English the same word is pronounced differently in different parts of the country, this being due rather to the varied methods of pronouncing vowels than to those of pronouncing consonants.

It is highly probable that the twenty-two symbols of the original alphabet were not pictographic—as is commonly assumed—but artificial and geometrical, and their names were an artificial mnemotechnic device. Indeed, though the value of each consonant is the value of the first letter of its name (b of
beth, g of gimel, d of daleth, etc.)—this principle being known as acrophony—it would be wrong to assume that it necessarily indicates the use of pictorial representations of the objects whose names the letters bore. Thus, the aleph was not 'an ox's head on its side', the beth not a 'house', the gimel not a 'camel', and so on. The adoption of the names was, it seems, a device similar to those of modern ABC-books for children, in which (of course, independently of the form of the letter) A stands for 'aeroplane' or 'acorn' or 'apple'; B for 'bunny' or 'bee' or 'butterfly'; C for 'cat' or 'coat' or 'candy' and so on.

As to the letter-order, the order of the Hebrew letters is the same as that of the original North-Semitic alphabet. That this is so can be proved by reference to acrostics in Psalms xxv, xxxiv, cxl, cxl; Prov. xxi, 10-31; and Lament. i-iv. Moreover, on the last day of the excavations at Lachish (in 1938) by the Wellcome-Marston Archaeological Expedition to the Near East, a schoolboy's scribbling was found on the vertical face of the upper step of the staircase which led up to the Palace; it included the scratching of the first five letters of the Early Hebrew alphabet in their conventional order. The inscription probably belongs to the late ninth or early eighth century B.C. and is the first example of the Hebrew alphabet being learnt systematically.

The order of the letters of the North-Semitic alphabet gives an appearance of phonetic grouping, but this may be accidental. The meaning of the names seems to affect the arrangement.

We move now to the West: out of the troubled darkness—which shrouded the transition from the Mycenaean civilization, of the Late Bronze Age (in the twelfth century B.C.), to the Early Greek primitive geometric art of the Iron Age (tenth-ninth century B.C.)—there came the remarkable invention of the Greek alphabet, the earliest fully-developed alphabetic system of writing, containing both consonants and vowels. The North-Semitic origin of the Greek alphabet is accepted by all serious scholars. The origin is proved by these facts: (1) The shapes of nearly all the Early Greek letters clearly recall their Semitic origin; (2) the phonetic value of the great majority of the Early Greek letters was the same as that of the Semitic letters; (3) the order of the Greek letters corresponds—with a few understandable exceptions—to the order of the Semitic letters; (4) the direction of writing in the Early Greek script, and in the derivative Etruscan script (also in the early Latin inscriptions), was from right to left, as in the Semitic; (5) the letter-names: whereas the Greek names are meaningless in Greek, the Semitic letter-names are generally words in the Semitic languages.

Much more difficult is the chronological problem, but inferences—there is no direct evidence—point to about 1000 B.C. as the time of the introduction of the Greek alphabet. Through its direct and indirect descendants, the Etruscan and Latin alphabets on the one hand, and the Cyrillic alphabet on the other, the Greek has become the progenitor of all the European alphabets. In the course of its long history, it had many other offshoots (in Asia Minor and Africa; as well as the Gothic alphabet). The Etruscans, a highly civilized people and the ancestors of the modern Tuscans, in Central Italy, were the predecessors of the Romans. The earliest of the over ten thousand Etruscan inscriptions is the Marsiliana Table (of the eighth century B.C.), which is the earliest preserved Western ABC.

The Greek-Etruscan alphabet became the ancestor of the Latin, but the Romans adopted only 21 letters; the ancient zeta was dropped and was replaced by a G (by adding a bar to C), but in the first century B.C. (after the conquest of Greece) the symbols Y and Z were adopted for the transliteration of Greek sounds, and were placed at the end of the alphabet. The subsequent history of the Latin alphabet consisted essentially in the external transformation of the single letters, especially in the cursive or current styles of writing. The monumental alphabet remained practically unaltered and in late medieval times was taken over for the mod-
Figure 1. Oldest extant example of the Early Hebrew ABC. The letters are (from left to right) e, b, g, d, h.

<table>
<thead>
<tr>
<th>NORTH SEMITIC</th>
<th>GREEK</th>
<th>ETRUSCAN</th>
<th>LATIN</th>
<th>MODERN CAPS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2. Development of the Alphabet from the North-Semitic of c. 1000 B.C. to modern capitals

57
ern majuscules. In the Middle Ages there was some further change: the signs U-V were differentiated and W was added; also I-J were differentiated.

Thus, the three-and-a-half-millennial history of the alphabetic letters has been concluded, and the present text is a very short summary of this history.

Figure 3. Etruscan inscription—the Marsiliana Tablet.
The earliest preserved Western ABC, probably belonging to the eighth century B.C.

Acknowledgments are made to Dr. Diringer and to the publishers for permission to reproduce Figs. 1 and 2 from his Writing (Thames & Hudson) and Fig. 3 from The alphabet in the history of civilisation (Hutchinson).

WORLD INDEX OF SCIENTIFIC TRANSLATIONS

The first annual cumulative volume, compiled by computer and covering available translations from non-western languages relating to science and technology that have come to the attention of the European Translations Centre, situated at Delft, in 1967, was published in May. It is the most comprehensive list of this nature that has ever been published and is a product of a wide scheme of voluntary co-operation initiated by the Organization for Economic Co-operation and Development.

It is in two parts: (1) an alphabetical listing of journal articles and patents translated at a great variety of kinds of places, and (2) a list of periodicals translated cover-to-cover, abstracted publications and periodicals containing selected articles.

The price is U.S. $25. It can be obtained through any bookseller, or direct from the E.T.C., Doelenstraat, 101, Delft, The Netherlands.