

same plan as the Anastasis.¹ It should also be recalled that the Holy Sepulchre has been the model for a large number of churches in all parts of the Christian world, which are round in form, our Temple Church being one of the well-known examples.

WILLIAM SIMPSON.

THE ALPHABET.

THE derivation of all modern alphabets of Asia and Europe, from the early script of Syria and of Asia Minor, and the derivation of the earliest script from a hieroglyphic system, are facts generally accepted by scholars. That the hieroglyphic system in question was the Egyptian is a very generally received opinion, but objections have been raised to it for several reasons. First, it is urged that the origin of the alphabet should be sought in Asia, where it first appears. Secondly, that the proposed Egyptian equivalents do not resemble the Phœnician or Greek letters, and bear no reference to the names of these letters; and, third, that De Rougé's comparisons are in several cases arbitrary and deficient in principle.

Dr. Isaac Taylor, while developing De Rougé's theory on this subject, has nevertheless stated that a derivation from the so-called Hittite is not perhaps impossible. There is a very strong reason for supposing such a derivation, which briefly is as follows:—The Greek alphabet and the earliest alphabet of Italy contain letters in addition to those of the Phœnician. The Asia Minor alphabets contain even more letters than the Greek. Thus, in Phœnicia, we have only 22 letters, in Greece 27, and among the Carians and Lycians about 30 and 33 letters respectively.

Dr. Sayce has suggested that these additional letters come from the old syllabary, which survived in Cyprus and in Egypt down to the days of Alexander the Great. But, generally speaking, antiquaries do not admit the possibility of a system of writing being made up from different sources. Thus we do not use Hebrew letters interspersed with the Latin, or even running hand with Roman. If then part of the alphabet came from the old syllabary of Asia Minor, it seems most probable that in this syllabary we should seek for the origin of the whole alphabet.

In addition to this consideration there are others which tend to a similar result. The Greeks in the southern islands took, it is true, 20 of the 22 Phœnician letters, and as a rule preserved the Semitic name of the letter and preserved the Semitic order. The Italian tribes, however (Etruscans, Oscans, Umbrians, &c.), did not apparently use these names,

¹ This Church is round, or, to be more exact, it is octagonal, and wants the twelve pillars; but it has a rock, with a footprint on it—said to be that of the Saviour. The Sakhra has also a footprint on it—said to be that of Mohammed's, and made by him when he ascended upwards on his celebrated night journey.

but called the letters *Be, Ce, De, &c.*, and the additional Greek letters in like manner have the names *Chi, Phi, Psi*, names which suggest a derivation from a syllabary, and from those syllables of the syllabary which had a short vowel sound.

Now, in the Cypriote, although the writing is syllabic, we find that the syllables with a short vowel sound are already beginning to be used as consonants. Thus, in the word *Basileus*, the final S is represented by *Se*, and in other cases *Ne* stands for N, and so on. Here, then, we see a possible means of evolution for an alphabet, and if the Greek and the Phœnician letters are found to be comparable to the syllables with weak vowel sound used in the Asiatic syllabary, we have, I think, the most natural origin possible for the alphabet, and may trace it through the syllabary to the original hieroglyphics of Asia Minor. In this case the larger alphabets of Asia Minor, Greece, and pre-Aryan Italy are to be regarded not as the children but as the sisters of the Phœnician, and we see that the Turanians of Asia Minor (Carians, Caunians, Lycians, &c.) did not abandon their original script, as is now supposed, in favour of Greek letters, but always possessed those letters either as letters or in an earlier stage as syllables.¹

In the Hittite system (so called) there appear to be two classes of signs, just as in Chinese or as in Cuneiform. The one class is the picture or ideogram (the Chinese *Key* or *Radical*), the other class—apparently represented as a rule by smaller emblems—is the weak root or grammatical complement (the Chinese phonetic), which is used for its *sound* value and not for its picture value. It is, I think, among these phonetics (which are by far the commonest signs on the Hittite texts) that we must search for the original emblems as a rule, while in the syllabary we must confine our comparisons to those syllables which have a short vowel sound, *ā, ē, ī*, and which we find to have been used as letters in the Cypriote.

The attached plate shows the comparison of the Asia Minor, Greek, Italic, and Phœnician letters with the Cypriote syllables of short vowel sound, and in some cases with the original hieroglyphic. It is possible that in some cases the comparison may be improved, but I do not think that the principles here laid down, can be considered unscientific.

The question of the names of the letters is more difficult. The meaning of the Semitic names is, in many cases uncertain. These names were only used within the sphere of the Phœnician influence, yet in several cases it seems to me that the sound belongs to the original hieroglyphic object, although, with the change from a Turanian to a Semitic language, the name has either been changed or the sound has received a new value, as will appear from a detailed examination.

1. *Aleph*. Possibly an ox head (*Accad. av*, "bull").

¹ The Ionian Alphabet which finally survived in Greece was Asiatic, and perhaps used by the Turanians of Phrygia, Caria, Lydia, and Lycia before the Aryans used it. From Lydia also it would have gone to the Pelasgi and the Etruscans.

	HITTITE HIEROGLYPH.	CYPRIOTE SYLLABLE.	CARIAN LETTER.	PHOENICIAN LETTER.	GREEK LETTER.	ETRUSCAN LETTER.
1		* * a	A	Ⲁ	Α	Α a
2		Ⲛ ⲛ be	b	ⲁ	Υ Ζ Β	Ⲕ ⲕ ? b
3	Ⲙ	ⲟ ga)	Ⲃ	ϸ ϣ ϸ) ϣ q c
4			Δ	Δ	Δ	ϣ ? ϣ ? d
5		Ⲓ ⲓ e	Ⲓ ⲓ	ⲓ ⲓ	Ⲓ Ⲓ	ⲓ e
6		Ⲓ ⲓ ve	Ⲓ ⲓ	ⲓ ⲓ	Ⲓ	ⲓ f
7		Ⲓ xe?	Ⲓ	Ⲓ	Ⲓ ϸ	ⲓ x
8		Ⲓ ⲓ khe	Ⲓ	Ⲓ Ⲓ	Ⲓ Ⲓ	Ⲓ Ⲓ h
9				Ⲓ	Ⲓ	Ⲓ Ⲓ t
10		Ⲓ ye	Ⲓ	Ⲓ	Ⲓ Ⲓ	Ⲓ i
11	Ⲓ	Ⲓ ke	Ⲓ	Ⲓ	Ⲓ	Ⲓ k
12	Ⲓ		Ⲓ	Ⲓ	Ⲓ Ⲓ	Ⲓ l
13	Ⲓ	Ⲓ mi	Ⲓ	Ⲓ	Ⲓ	Ⲓ m
14	Ⲓ	Ⲓ ne	Ⲓ	Ⲓ	Ⲓ	Ⲓ n
15	Ⲓ	Ⲓ si	Ⲓ	Ⲓ	Ⲓ Ⲓ	Ⲓ s
16	Ⲓ	Ⲓ ya	Ⲓ Ⲓ	Ⲓ	Ⲓ	Ⲓ ā o
17		Ⲓ pe	Ⲓ	Ⲓ	Ⲓ Ⲓ	Ⲓ p
18			Ⲓ	Ⲓ Ⲓ	Ⲓ Ⲓ	Ⲓ M ts
19			Ⲓ	Ⲓ	Ⲓ	Ⲓ q
20	Ⲓ	Ⲓ ra	Ⲓ	Ⲓ	Ⲓ Ⲓ	Ⲓ Δ r
21		Ⲓ se	Ⲓ	Ⲓ	Ⲓ Ⲓ	Ⲓ z s
22	Ⲓ	Ⲓ ti	Ⲓ	Ⲓ	Ⲓ Ⲓ	Ⲓ X T t
23		Ⲓ u	Ⲓ	Ⲓ	Ⲓ	Ⲓ Y V u
24	Ⲓ	Ⲓ vo	Ⲓ	Ⲓ	Ⲓ	Ⲓ Ⲓ ph
25			Ⲓ		Ⲓ	Ⲓ X ? x
26		Ⲓ se	Ⲓ	Ⲓ	Ⲓ	Ⲓ Y ps
27			Ⲓ	Ⲓ	Ⲓ	Ⲓ Ω o

2. *Beth*. Cypriote *be* is nearest to the early Greek (Melos and Corinth) forms.

3. *Gimel*. Cypriote *ga* ("crook" in Altaic speech).

4. *Daleth*. See what is said below.

5. *Heh*. The closed form is the oldest, perhaps from a hieroglyphic representing a house (*E*).

6. *Vau*. The Greek Digamma. Perhaps the Cypriote *ve*. The Cypriote *u* is, however, nearer to the Phœnician form. (See No. 27.)

7. *Zain*. Perhaps from a Cypriote *Ze*.

8. *Cheth* appears to be the Cypriote *Che*.

9. *Teth* does not appear to be known as yet in Cypriote.

10. *Yod*, "hand," seems to be the Cypriote *ye*, perhaps from an old hieroglyphic hand (*a, ya, &c.*, in Altaic speech—"the right hand.") The Greek form is a single stroke. In Altaic speech *a, ei, yat* are words for "number one." The Greek and Phœnician letters may perhaps have different derivations.

11. *Caph* appears to be the Cypriote *ke*. The word is rendered "hollow of the hand."

12. *Lamed*. See what is said below.

13. *Mim*. The Greek and Carian forms suggest a connection with Cypriote *mi* or *me*.

14. *Nun* seems to be a degraded form of the Cypriote *ne*.

15. *Samech*. Apparently the Cypriote *si*, from an emblem for "eye," (*si*, "eye," "see" in Altaic speech). The Pelasgic *S* would have the same origin.

16. *Ain*. Cypriote *ya*, Carian *a*—a pot in the original hieroglyph (Altaic *a, ya, &c.*, "water").

17. *Pe*. Perhaps a variation of *Be* (No. 2).

18. *Tsade*. A letter soon lost in the west.

19. *Koph*. See what is said below.

20. *Resh*. The Cypriote *Ra* is tolerably close.

21. *Shin*. Some forms of the Cypriote *se* are similar.

22. *Tau*. In some forms recalls the Cypriote *ti*.

23. *Upsilon* appears to be the Cypriote *u*.

24. *Phi*. Apparently the Cypriote *vo* (or *mo*).

25. *Khi*. See what is said below.

26. *Psi*. Apparently the Cypriote *se*.

27. *Omega*. The Carian *o*.

In this comparison it will be noted that out of 27 letters 20 can be traced in Cypriote syllables having short vowel sounds. The comparison is not quite complete, but our knowledge of the syllabary is perhaps not yet complete either. In 10 cases, the original hieroglyph may be suggested.

The Cypriote signs compared are the commoner or normal forms. As regards the names of the Phœnician letters it is only in 15 cases that any Semitic meaning is known to attach to the names, and in many of these there is much doubt. Aleph "ox," Beth "door," Gimel "camel," Vau

"hook," Cheth "fence," Yod "hand," Caph "hollow of hand," Mim "water," Ain "eye," Pe "mouth," Resh "hook," Shin "teeth," are Semitic words, but it is only in the cases of Aleph, Gimel, Vau, Cheth, Yod, and Ain, that any resemblance is supposed to exist between the name and the form.

It is certain that the Greeks knew and adopted the 22 Phœnician letters found in the early alphabets of Thera and Melos, with the exception of the Phœnician Samech and Tsadi.

On the other hand the early alphabets of Abu Simbil and of Ionia and Corinth already include the letters $\xi\phi\chi\psi\omega$ about 620 B.C., omitting Samech and Tsadi, and Digamma. A century later the Greek alphabet was complete, having lost Koppa and Digamma. The Italic alphabets retained Digamma as *F*, with Koppa as *Q*, and Samech occurs in Pelasgic. These Italic alphabets never used the Semitic names. The Greek names Alpha, Beta, Delta, &c., seem to be of Aramean, rather than of Phœnician origin.

The Phœnicians wrote only from right to left. In Cypriote, the texts run both from right to left and left to right. The Greeks (and the Pelasgi) wrote Boustrophedon-wise, or in alternate lines, right to left and left to right, just as did the Hittites. Thus the mode of writing as well as the characters connect Greek epigraphy with Hittite hieroglyphics.

It is to be noted that in the cases of *Teth*, *Tsadi*, and *Koph*, there is a good reason for not finding them in Cypriote. They are Semitic letters, which naturally do not represent sounds of the Greek dialect of Cyprus. *Chi* and *Omega* are late additions to the Greek alphabet, and these not unnaturally do not appear in Cypriote. The only two others not accounted for are *Delta*, the δ and τ not being distinguished in Cypriote, and *Lambda*, which may be the Cypriote *le* or *re*.

The present opinion of some antiquaries that the Greek alphabet has a double origin, appears highly unsatisfactory in view of the manner in which the letters may, in so many other cases, be traced in Cypriote, and nothing could be more natural than a Cypriote derivation for Greek letters, since we know that the Greeks used this character about 400 B.C. The fact that Etruscans, Pelasgi, and the Lycians,¹ Carians, and Phrygians, used the same characters with the Greeks is also easily explained by the Turanian and Asiatic origin of the letters.

C. R. CONDER.

¹ The Lycian included five other vowels of doubtful sound not here shown, four of which compare with Cypriote; two of them occur in Carian and one in Phrygian; another vowel, common to Phrygian and Lycian, is to be added, making 33 letters in all. In other respects Lycian is like Carian, though not known to have possessed letters 8, 15, 18, 19, 24, of the table.