AEGYPTUS

RIVISTA ITALIANA DI EGITTOLOGIA E DI PAPIROLOGIA

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Anno LXXXII
Gennaio - Dicembre 2002

ESTRATTO

Syllabic and Alphabetic Script, or the Egyptian Origin of the Alphabet

Today, nearly all the world uses alphabetic scripts. A major exception is Eastern Asia, with the Chinese script and related systems (1). The alphabet script has spread in the world in the last 3000 years. The point of departure was Syria, the Phoenician alphabet and its off-spring, the Aramaic script. It is the origin of the Hebrew, Arabic, Greek, Latin scripts, etc. From Syria it has spread both eastward and westward. From the Phoenician script, the Aramaic script is derived. One of the latter's varieties has become the Hebrew script. From a later variety, Syriac, the Proto-Arabic script has derived among the Nabataeans, in the Kingdom of Petra. Already before, from the 7th cent. BC on, Aramaic language and script has rapidly spread in the whole Near East, in particular in the Persian Empire, and the Aramaic script was consequently used for a variety of other languages, among them Middle Persian (Pahlevi), whence it penetrated to Central Asia. The Uigur script became dominant in the Mongol Empire, and it was eventually adapted also for the Mongolian language; this inspired the Manchu of North-Eastern China to use it for Manchurian also. This is the Northern branch of the eastward expansion of Aramaic: Pahlevi - Uigur - Mongolian - Manchurian.

The Old Aramaic script must also have spread to India, via Iran and Afghanistan, and from it the oldest Indian script originated. These scripts, Kharosti and Brahmi, which developed an indication of the vowels, are at the origin of all scripts of India and others in Indo-China, Indonesia and also the Tibetan script.

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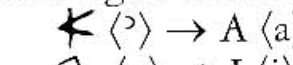
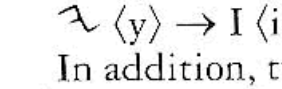
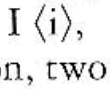
(1) For a survey see, *e.g.*, HARALD HAARMANN, *Universalgeschichte der Schrift*, 1990, and several contributions in: WILFRIED SEIPEL (ed.), *Der Turmbau zu Babel. Ursprung und Vielfalt von Sprache und Schrift* (exhibition catalogue), 2003, vol. III A: *Schrift*.

This is the Southern branch of the eastward expansion of Aramaic.

Of paramount importance is the westward expansion of the Phoenician script, not so much the development of the Punic script in the Phoenician colonies but rather the acquisition of the Phoenician script by the Greeks. They, too, felt the need to write vowels, but they proceeded in a different way. They expressed vowels not by modification of the consonants, or by graphic additions to them, but rather by reinterpreting some consonants, *viz.* signs which they did not need:

 ⟨ʾ⟩ → A ⟨a⟩,  ⟨h⟩ → E ⟨e⟩,  ⟨ḥ⟩ → H ⟨ɛ:⟩,
 ⟨y⟩ → I ⟨i⟩,  ⟨ʿ⟩ → O ⟨o⟩.

In addition, two more vowel signs had to be developed, *viz.* Y ⟨u⟩ (which is obviously a doublet of  <  ⟨w⟩) and Ω ⟨ɔ:⟩.

A conspicuous feature is that the sequence in which the letters are memorised and in which the alphabet is noted is a more or less fixed one, as can be seen from the several Proto-Canaanite and Canaanite abecedaries: ⟨ʾ⟩ > ⟨a⟩, ⟨b⟩, ⟨g⟩, ⟨d⟩, ⟨h⟩ > ⟨e⟩, ⟨w⟩, ⟨z⟩ (there exists also an entirely different sequence, for which see later).

Another conspicuous feature is that the names of the letters are similar in many cases in Aramaic/Hebrew and in Greek:

Hebrew:

ʾAlɛp̄ *ʾalp-	Bēṯ *bayt-	Gímɛl	Dálɛṯ *dalt-	Hē	Wāw	Záyin *zayn-	Ḥēt	Ṭēt	Yōḏ	Kāp̄ *kapp-

Greek:

Alpha	Bē̆ta	Gamma	Delta	E (psil.)	...	Zē̆ta	ē̆ta	Thē̆ta	Iō̆ta	Kappa

Some of them have clearly a meaning in Semitic. Aleph - ox, Bet - house, Daleth - door, Kaf - hand, Mem - water (2), Resh - head (3), etc. In many of these cases, the shapes of the signs, in their Phoenician form, can be easily interpreted as a stylised depiction of the object in question.

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(2) "Water" is actually a *plurale tantum* in Hebrew: *máyim* ; in Akkadian: *mēm-*; Aramaic (*maiy-ā*), as also Arabic (*mā*ʾ-), has a singular form.

(3) *Rēš-a* is actually Aramaic, whereas the Hebrew form is *rōš*. The Proto-Semitic form is preserved in Arabic *raʾs-*.

Aleph — head of an ox: not profile view, as the Egyptian hieroglyph , but rather frontal view  :  .

Beth — ground plan of a house: Whereas this is  in Egyptian hieroglyphics, and similar in Hieratic:  ,  or the like, the Phoenician "house" looks different:  . It is probably not, as some assume, derived from the ground plan of the *zerîba* (shelter), Egyptian hieroglyph  with the phonetic value *h*, hieratic  and similar. A third possibility is the ground plan of a compound or farmstead. But the Phoenician sign resembles neither the Hieroglyphic form  nor the usual Hieratic variants,  and similar. There are, however, some variants that come closer, like  and, in particular,  (both from the hieratic visitors inscriptions at Hatnub).

Daleth — a door-wing: the Egyptian sign with this pictorial content is  , though always used horizontally:  . The Phoenician *d* sign  may be an abstraction of this.

Rosch — a human head: the Egyptian head-hieroglyph shows the profile: ; Hieratic has forms like  ,  (all facing right: the bulge on the left is the back of the head, the right vertical line is the beard). Phoenician  seems to be an abstraction of this, though the triangle is here the face.

As for the sound values of these signs, they correspond to the first consonants of their Semitic designations, and are in the same time also identical with the first consonant of the respective letter names. The phonetic values of the signs are gained by the acrophonic principle:

Sound value	ʾ	b	d	k	m	r
object depicted, in Semitic words	*ʾalp-a "ox"	*bayt-a "house"	*dalt-a "door-wing"	*kapp-a "flat hand"	*maym-i* "water"	raʾš-a "head"
Letter name (Hebrew)	*ʾĀlɛp̄*	*Bēṯ*	*Dālɛṯ*	*Kap̄*	*Mēm*	*Rēš*

There are, however, some arguments against the assumption that this Alpha-Beta system is of Phoenician origin, of 1000, or, say, 1200 BC.

– The letter names are not exactly identical with the respective words in the individual languages. For example, "head" is in Phoenician and in Hebrew *rōš* and not *rēš* , "house" is in Hebrew *bayiṯ* and not *bēṯ* (*bēt-* is, in fact, the construct form in Hebrew),

etc. If the ox-word existed in Hebrew it would be *'*ɛlɛp̄*, rather than *'*alɛp̄*. The letter names are probably much older.

– Only some of the letter names are telltale, that is, are clearly discernible lexicon items, like the ones mentioned.

– The Greek letter names — the greatest part of which is virtually identical with the Semitic names — have preserved a feature that is very old in the Semitic languages, *viz.* an ending *-*a* of the absolute status of the noun (4), as it is attested in proper names of Old Akkadian and what Lipiński calls Palaeosyrian (5).

Some more arguments for assuming that the alphabet is older than Phoenician, and that the latter is the result of a longer tradition or development:

In the coastal town of Ugarit (Râs Shamra), an alphabetic script was used in the 13th and 12th centuries that was engraved in clay tablets in the way of Mesopotamian cuneiform, and therefore has a very similar appearance. Yet it is alphabetic, with 30 signs only, and not a syllabic script. More than one Ugaritic tablet has preserved the order of the letters, and this is virtually the same as in Hebrew, or the Arabic *'abgad-hūz* order, the Greek, etc., save for the signs for phonemes that do not exist anymore in Phoenician and Aramaic, *viz.* ḫ, ś, ḏ, ẓ, ṯ (which has switched places with š), ġ.

Ugaritic cuneiform alphabet	Phoenician (+ Aramaic, Hebrew) alphabet:	Remarks
ʾa	ʾ	Ugaritic has also vocalised forms for ʾi and ʾu, see in the end.
b	b	
g	g	
ḫ	—	ḫ has merged with ḥ in Phoenician, Aramaic and Hebrew.
d	d	
h	h	
w	w	

(segue)

(4) JOSEF TROPPER, *Die Erfindung des Alphabets und seine Ausbreitung im nordwestsemitischen Raum*, in SEIPEL (ed.), op. cit., pp. 173-181, in particular p. 178.

(5) EDWARD LIPIŃSKI, *Semitic Languages. Outline of a Comparative Grammar*. 2nd edition, 2000, p. 265.

Ugaritic cuneiform alphabet		Phoenician (+ Aramaic, Hebrew) alphabet:		Remarks
z		z		
ḥ		ḥ		
ṯ		ṯ		
y		y		
k		k		
š		—		Phoenician, Aramaic and Hebrew place š where Ugaritic has ṯ. Note that in Hebrew *ṯ has become š. — Proto-Semitic *ś is regularly š in Ugaritic, שׁ ś in Hebrew (distinguished from שׂ š in punctuation only), and ס s in Aramaic.
l		l		
m		m		
ḏ		—		Dental fricatives have merged with other sounds in Phoenician, Aramaic and Hebrew; *ḏ is d in Aramaic, but z in Hebrew.
n		n		
ẓ (ṱ)		—		Dental fricatives have merged with other sounds in Phoenician, Aramaic and Hebrew; *ṱ (Arabic ظ ẓ) is ṭ in Aramaic, but ṣ in Hebrew.
s		s		Originally /ts/. Cf. Greek Ξ / ξ ⟨ks⟩.
ʿ		ʿ		
p		p		
ṣ		ṣ		
q (ḳ)		q		
r		r		
ṯ		š		Dental fricatives have merged with other sounds in Phoenician, Aramaic and Hebrew; *ṯ is t in Aramaic, but š in Hebrew.
ġ		—		ġ has merged with ʿ in Phoenician, Aramaic and Hebrew.
t		t		
ʾ i		—		See above, for ʾa
ʾ u		—		See above, for ʾa
ḍ (ṣ)		—		*ḍ (*ṣ), Arabic ض ḍ — obviously a later addition to the Ugaritic alphabet — has merged with other sounds in Phoenician, Aramaic (ʿ) and Hebrew (ṣ).

In several cases it seems that the signs are of the same pictorial origin as the Phoenician signs. Here are some Ugaritic letter forms that may be compared with Phoenician letters of corresponding or similar phonetic value.

g	𐎂		g	𐤂
d	𐎄		d	𐤃
h	𐎅		h	𐤄
w	𐎆	(turned 90°)	w	𐤅
z	𐎇		z	𐤆
n	𐎐	(turned 90°)	n	𐤍
š	𐎌		š	𐤔
ṯ	𐎘		t	𐤕

There is another script tradition — and a very great one indeed — that must be of a similarly early date of origin, *viz.* the South Semitic or Gayhadic script tradition: In the 1st millennium BC, its most important representative is the script of the South Arabian inscriptions, of the Kingdoms of Saba, Mina, Qatabân and Haḍramawt. This literary tradition is believed by some to be already rooted in the second half of the 2nd millennium BC.

Example (6):

𐩦𐩢𐩧 | 𐩱𐩡𐩸𐩱𐩵 | 𐩥𐩱𐩭𐩠𐩥 (2) 𐩠𐩡𐩤𐩠 | 𐩹𐩺 | 𐩭𐩨𐩱𐩩 *śḥr ʾlzʾd wʾḫhw hlqh ḏy ḫbʾt* "Magic (= magical protection) of ʾLZʾD and his brother HLQH, (both) of (the) ḪBʾT (clan)."

In this south-eastern tradition, the letters of the alphabet are arranged in a totally different order:

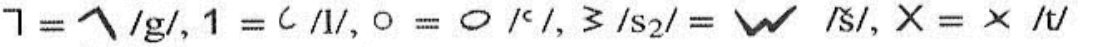
h	*l*	*ḥ*	*m*	*q*	*w*	s_2	*r*	*b*	*t*
s_1	*k*	*n*	*ḫ*	*ṣ*	s_3	*f*	ʾ	ʿ	*ḍ*
g	*d*	*ġ*	*ṭ*	*z*	*ḏ*	*y*	*ṯ*	*ẓ*	

Variants of this sequence are in use today for Ethiopian, Amharic etc. But it is also attested for the simple phonetic signs

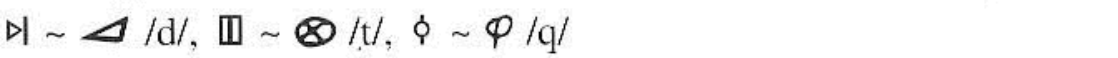
(6) Relief with two bull-heads. Vienna, inv. no. SEM 24. See DAWID HEINRICH MÜLLER, *Südarabische Alterthümer im Kunsthistorischen Hofmuseum*, 1899, p. 45 and pl. IX; SEIPEL (ed.), op. cit., vol. III B, catalogue no. 3.3.30, pp. 185-186, and various other Viennese exhibition catalogues.

of Egyptian Demotic and Hieroglyphic (7), on the one hand, and on a few abecedary tablets from Canaan (Ugarit and Beth Shemesh near Jerusalem) which were recently detected (8).

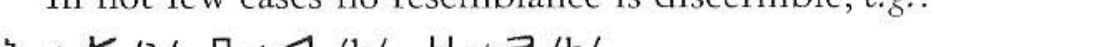
Several of the forms of the South Arabian or Gayhadic script show very clear resemblance with Phoenician, *e.g.*:



In other cases the resemblance is less evident, *e.g.*:



In not few cases no resemblance is discernible, *e.g.*:



Although both the South Arabian and the Phoenician script have obviously the same origin, it is not possible to derive one from the other (9).

In the first millennium BC, the South Arabian script spread across the Red Sea to Eritrea and Ethiopia, and it was also used for Old Ethiopian and eventually for many other Semitic and Cushitic languages. It is in use till today. It indicates vowels in a similar way as the Indian scripts.

But this is not the end of the career of this line of development of the Semitic alphabet. In the Sahara, and even on the Canary Islands, numerous rock inscriptions of the first millennium BC have been found that seem to resemble the South Arabian script. In the 3rd century BC this Saharan script becomes the official medium of the Numidian Kingdom, in Tunisia etc., for inscriptions in the native language (Old Libyan). Several bilingual texts, with Latin and Punic, allow us to read and to analyse these texts. The result:

1) The language is Proto-Berber.

2) The script is the ancestor of the modern Tuâreg script, cal-

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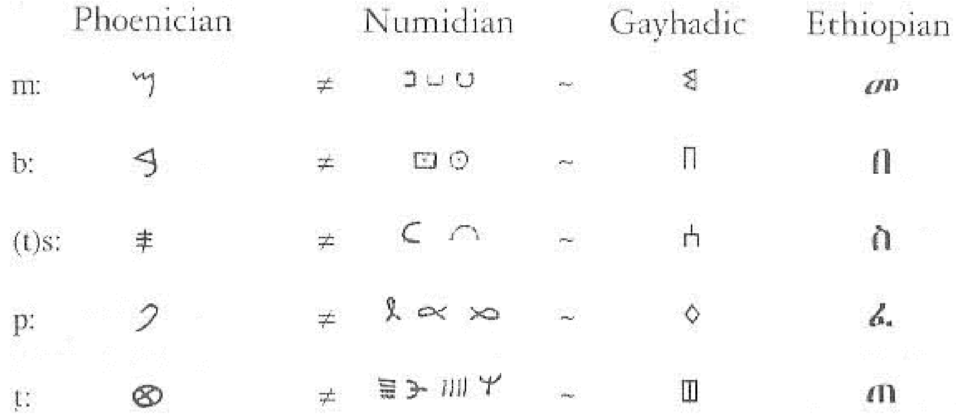
(7) JOCHEM KAHL, *Von h bis q. Indizien für eine 'alphabetische' Reihenfolge einkonsonantiger Lautwerte in spätzeitlichen Papyri*, «Göttinger Miszellen» 122 (1991), pp. 33-47; JOACHIM FRIEDRICH QUACK, *Ägyptisches und südarabisches Alphabet*, «Revue d'Égyptologie» 44 (1993), pp. 141-151.

(8) JOSEF TROPPER, *Entstehung und Frühgeschichte des Alphabets*, «Antike Welt» 32/4 (2002), pp. 353-358, in particular p. 354.

(9) So already ALAN HENDERSON GARDINER, *The Egyptian origin of the Semitic alphabet*, «Journal of Egyptian Archæology» 3 (1916), pp. 1-16, especially p. 3, and note p. 140.

led Tifînagh (10), revived in our days as an expression of Berber national identity, in the Maghreb countries, in particular in the Kabyle area in Algeria.

3) It is much more plausible that this script is derived from the South Arabian script. Cf. the following correspondences (11):



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All this amounts to the conclusion that Phoenician, as we know it, is not the oldest phase of the development of the alphabetic script. Actually, an older form is known since more than one hundred years. It is the Proto-Sinaitic script, also called Proto-Canaanite script: the oldest alphabet so far, a genuine precursor of the Phoenician script.

It is true that the Proto-Sinaitic script is far from being one hundred percent deciphered. This is understandable, as there has not been found a bilingual text, and all extant texts are very short inscriptions (on rocks, on sculptures or on stone walls). It is, in the contrary, astonishing that it has been at least partly deciphered. There is also not a one-to-one relation between the older Proto-Sinaitic script and the younger Phoenician script.

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(10) Tifinagh is a feminine plural form, with the *ti-* prefix; Otto Rössler derives its root *-finaǧ* from Greek *pinax* "writing tablet", according to others it goes back to Latin *punica* "Punic (script)".

(11) So already ENNO LITTMANN, *L'Origine de l'alphabet libyen*, «Journal Asiatique» 10.4 (1904), pp. 423-440; OTTO RÖSSLER, *Die Numider - Herkunft. Schrift. Sprache*, in HEINZ GÜNTER HORN, CHRISTOPH B. RÜGER (eds.), *Die Numider. Reiter und Könige nördlich der Sahara*, (exhibition catalogue), 1979, pp. 89-98; OTTO RÖSSLER, *Libyen von der Cyrenaica bis zur Mauretania Tingitana. Die Sprachen im Römischen Reich der Kaiserzeit*. «Beihefte der Bonner Jahrbücher» 40 (1980), pp. 267-284, especially, pp. 277-278.

What is thought to be a depiction of the same object in both scripts may look quite different. Also, the number of signs of the Proto-Sinaitic script is greater than the classical 22 of the Phoenician and Aramaic scripts. The reason for this can be found in the Semitic loan-words in the Egyptian of the post-Hyksos periods (12). The language(s) from which they originate has (have) obviously preserved the full number of the 29 Proto-Semitic phonemes whereas the Aramaic, Phoenician and Hebrew languages of the 1st millennium BC had lost several of them and ended mostly up with only those 22 for which there exist graphemes in the Phoenician and Aramaic scripts.

How, then, was it deciphered? Gardiner (13) started from two basic ideas.

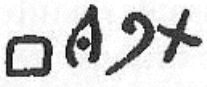
1) The Phoenician script must have developed from an older script, *viz.* the Proto-Sinaitic script.

2) The Proto-Sinaitic script was to a great extent inspired by the Egyptian hieroglyphs. But the phonetic values of the Proto-Sinaitic signs are entirely based on a Semitic idiom and have nothing to do with the Egyptian language. In this way Gardiner divined that the phonetic value of the Eye must have to do with Semitic **ʿayn-*, rather than Egyptian *ỉr.t*, and the House and the Head with Semitic **bayt-* and **raʾš-*, respectively, rather than Egyptian *pr* and *tp*. In this way he obtained the sound values of the first two signs in a word which he assumed to designate the goddess Hathor. The other two could be guessed from their similarity with Phoenician signs, *viz.* Lamed and Taw. Thus he reached the reading BʿLT, *i.e.* **baʿlat-* "the (divine) Lady".

No. 346 (the statue)

No. 353

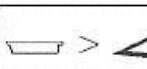
No. 345 (the sphinx)



(12) JAMES E. HOCH, *Semitic Words in Egyptian Texts of the New Kingdom and Third Intermediate Period*, 1994.

(13) ALAN HENDERSON GARDINER, *The Egyptian Origin of the Semitic Alphabet*, «Journal of Egyptian Archæology» 3 (1916), pp. 1-16 and note p. 140.

The acrophonic principle was known for the Phoenician script, not so much from the shapes of the signs but rather primarily by their names. Aleph can be explained as the Semitic word for ox, Akkadian 'alp-. Bet is obviously the word for house, Semitic *bayt-, Resh is to be derived from Semitic *ra'š-, 'head', etc. In each case the letters can be easily explained as stylised depictions of the respective object.

						
Sound value	ʾ	b	d	k	m	r
onject depicted, in Semitic words	*'alp-a "ox"	*bayt-a "house"	*dalt-a "door-wing"	*kappa-a "falt hand"	*maym-i "water"	*raʾš-a Rēš
Letter name (Hebrew)	ʾAlɛp̄	Bēt̪	Dâlɛt̪	Kap̄	Mēm	Rēš

In the Proto-Sinaitic script, these objects could be found too, though in a less stylised form. This form was in many cases a variant form or a modification of an Egyptian hieroglyph. But of course their function was clearly different from that of the Egyptian. The signs of the Proto-Sinaitic script expressed one consonant each, or, in an other view (J. Gelb), an open syllable the vowel of which is not determined; it never expressed a closed syllable, consisting of two consonants, or a sequence of two syllables, consisting of three consonants. And it never expressed the word for the object it depicted (ideographic use). In this way, the lexical item *tp* 'head' yielded the writing  of the word in Egyptian, whereas the lexical item **rá*ʾš- 'head' yielded the consonant sign *r*.

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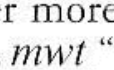
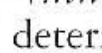
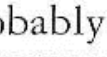
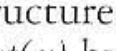
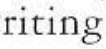
The traditional assumption is that the Proto-Sinaitic script was developed at the copper mines of Sinai peninsula which were run by the Egyptian state, though mainly with Semitic speaking personnel. These groups were thought to have created it in a certain analogy with the Egyptian script. This view is massively challenged by newer evidence. Attestations of the Proto-Sinaitic script were discovered in many places in Canaan (hence also called "Proto-Canaanite script"). They are judged to be of various

dates between the 18th and the 12th century BC, the time of the earliest attestations of the Phoenician alphabet. A few years ago an important discovery was made in a rather distant area. In the Wâdi el-Ḥôl, in the Western desert, along an ancient trade route between Thebes and Abydos, two lines of an inscription in a similar script was found, and it was dated to 1900 to 1800 BC (14). This means that the Pro-Sinaitic script was used, not only in the Sinai peninsula and in Canaan, but rather also in other marginal areas of Egypt, and it goes back at least to the time of the twelfth dynasty.

It was already Gardiner who has drawn attention to the fact that a quasi-alphabet existed in Egypt already since the late Old Kingdom. It is the way of writing that was used, in particular, for the Execration Texts. A very similar system was used in the New Kingdom. Helck called this the Later Transcription System, in contradistinction to the Earlier Transcription System of the Late Old Kingdom and the Middle Kingdom. In the latter, 1-consonant signs were mainly used, but also 2-consonant signs, and further more, whole short words, like  *ib* "kid", for -*ʾab*-, or  *mwt* "dead", for -*mut*-, both writings including the traditional determinatives of these Egyptian words (whose meaning had, of course nothing to do with the Semitic name or word in question). The Proto-Sinaitic script, on the other hand, was a pure letter script, each sign corresponding to one phoneme, and with no word signs and no determinatives whatever. Nevertheless, a certain correspondence is there: If, e.g., the Semitic word *Baʿlat(u)* would be written in this earlier transcription system it would probably either run  or  . The latter equals in structure completely with the Proto-Sinaitic script, rendering *Baʿlat(u)* by  , *i.e.* ⟨b(V)-ʿ(V)-l(V)-t(V)⟩.

Normal Egyptian writing is purely consonantal. It is used by Egyptians for their own language. But both the earlier and the later transcription systems indicate the vowels to a certain

(14) JOHN COLEMAN DARNELL, *Theban Desert Road Survey in the Egyptian Western Desert I: The Rock Inscriptions of Gebel Tjauti in the Theban Western Desert, Part 1, and the Rock Inscriptions of the Wadi el Hôl*, Part 1 (Oriental Institute Publications 119), Chicago 2002; IDEM, *Die frühalphabetischen Inschriften im Wadi el-Hôl*, in SEIPEL (ed.), op. cit., vol. III A: *Schrift*, 2003, pp. 165-171; also cf. STEFAN JAKOB WIMMER, SAMAHER WIMMER-DWEIKAT, *The Alphabet from Wadi el-Hôl. A First Try*, «Göttinger Miszellen» 180 (2001), pp. 107-112.

degree. They were used for foreign words and names (persons and countries).

So the idea of a kind of alphabet script was realised in Egypt already in the end of the 3rd millennium.

The so-called Proto-Sinaitic script is attested beginning form ca. 1900 or 1800 BC (12th dynasty), and in more then one area near Egypt. Its sign values are based on Semitic vocabulary, in acrophony.

Those who worked it out must have had a profound knowledge of the Egyptian Hieroglyphs, both in respect to the forms of the signs and their sound-values and in respect to the system. It presupposes a high degree of specialised knowledge — not many, apart from priests, higher official and specialists would dispose of this. I just cannot imagine that this was done by some non-Egyptians mining foremen or caravan leaders. It may have been the intentional work of Egyptian officials, Egyptian scribes, with knowledge of Semitic Canaanite. This alphabetic Semitic script was probably created with the intention of facilitating the administration of projects that involved speakers of that language. It is significant that this invention was not welcomed by the Syro-Canaanite city states: they continued to use a foreign idiom — Middle Babylonian — written in cuneiform, with its several hundreds of signs, instead of writing their own idiom with a practical script comprising less than 30 letters. The reason is probably that it had the stain of being an Egyptian "imperialistic" innovation. A break-through was only achieved when Ugarit officially adapted the alphabet, writing it in the same way as up till then the cuneiform: that is by engraving it in clay tablets. At about the same time it also made its way to South Arabia where it was to become the medium of a great antique civilisation.

Summing up, we can state: according to all the evidence cited, the Alphabet which we all are using, in various scripts and many languages, was not created by the Phoenicians, around 1000 BC, as tradition has it. Rather it is nearly 1000 years before that it was created, *viz.* some time after (or even around, or before) 2000 BC, in Egypt, by Egyptians in co-operation with speakers of a Semitic language, with the scope of facilitating communication with Canaanite Personnel.

Wien HELMUT SATZINGER