

The Libyco-Berber inscriptions in the Selima Oasis

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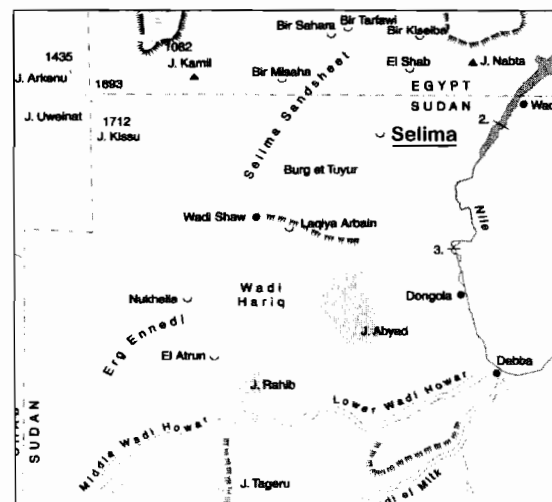
The Selima oasis lies in northern Sudan, in the eastern part of the vast sandy plain called «Selima Sandsheet». In the middle of the homonymous depression, approximately 60 m lower than the surrounding plain and at an altitude of about 270 m a.s.l., Selima is since the remotest times an important halting point to rest and refill water supplies along the «Darb el-Arba'in». This trade route, the so-called «Forty Days' Road», follows a north-east direction and connects Darfour, Wad-dai and Kordofan with the Kharga oasis in Egypt - passing through the oases of Rahib, El-Atrun, Laqiya Arba'in, Selima, El-Shab - and from there Aswan or Assiut and the Nile Valley. Selima lies about 200 km after the long-time abandoned oasis of Laqiya Arba'in, and about 120 km before the small Egyptian oasis of El-Shab (Fig. 1). Up to the end of the 19th century the Darb el-Arba'in was one of the main routes to take slaves and a variety of exotic goods from tropical Africa to Egypt (Lapanouse, 1803-1804; Budge, 1907; Harding-King, 1925; Shaw, 1929; Almásy, 1929; 1930; 1939; Hinkell, 1979). Possibly, the Darb el-Arba'in route was known and in use as a connection between Dynastic Egypt and the

southern countries. Arkell (1961) suggests in fact that this could have been the track followed by Harkhuf's caravan to reach the land of Yam during the reigns of Merenre and Pepi II. So far, however, no certain evidence of the Pharaonic period has been found at Selima. Its sinister reputation comes from the eye-catching white colour of the numberless human and camel bones scattered all along the way, so much so that to this day the road is indicated on the maps with the words «Track marked with white bones».

The first Europeans to reach the oasis in October 1698 were Charles Jacques Poncet, medical doctor, in the company of father Charles François Xavier de Brévedent, a Jesuit missionary, P. Benedetto and two Franciscan friars (Foster, 1949). On the 31st December 1700 a caravan with Father Theodoro Krump accompanied by a few Franciscan missionaries, stopped at Selima and then revisited it on its way back the following November. Krump was the first to mention the ruined building (Krump, 1710). In October 1704, it was the turn of the vice consul of Damietta, Jean-Jacques Le Noir du Roule, with his entourage, but these travellers did not leave us any out-

standing information about the oasis (Hinkel, 1979). In June 1793 and later on in 1796, W.G. Browne gathered some information and reported that the oasis was once inhabited by a princess who, like the Amazons, was a skilful archer and used to ride a horse while waving a war mace, followed by a great number of subjects spreading terror all over Nubia. The princess's name was Selimé, and Browne attributed to her and her tribe the construction of the mysterious building (Browne, 1799).

Fig. 1. Map of the Selima area.
(After S. Kröpelin, ACACIA, Köln).



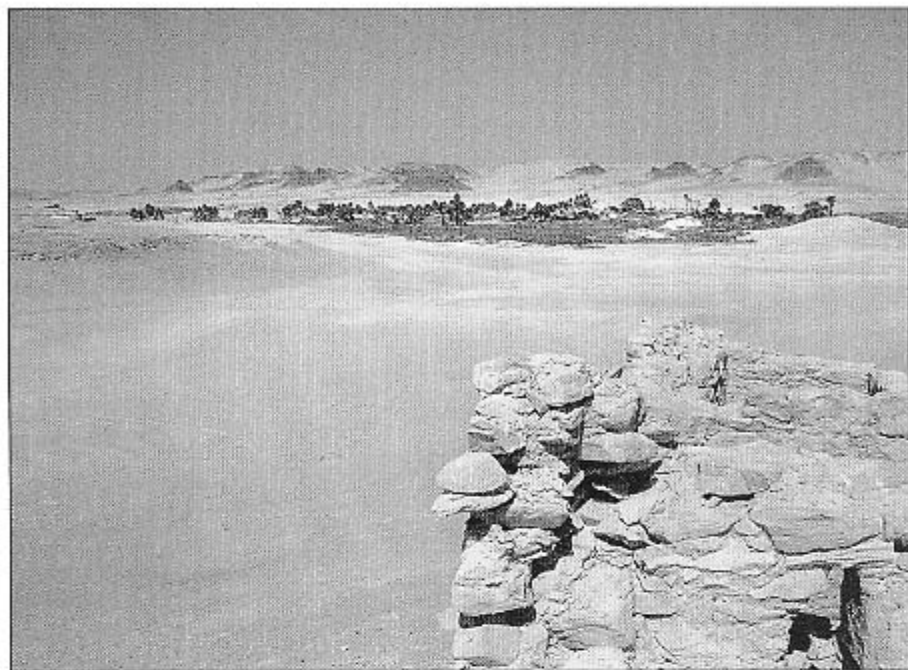


Fig. 2. View of Selima oasis from the ruins of the stone building.

The first accurate description of the oasis was written in May 1822 by Frédéric Cailliaud, a French silversmith with a vocation for exploration and archaeology. Starting from the island of Sai, Cailliaud decided to reach Selima after some of his guides reported to him the presence of ancient ruins. He remarked that the oasis was divided into two parts, described the three water wells and carefully noted the number of date-palms - although he counted only three or four hundred, a number considerably lower than reality - and also took note of several doum palms and tamarisks. He described the vast marshes situated at the centre of the oasis, from which at that time natrun (sodium carbonate) was extracted. Moreover, he supplied details of the only ruins he found, the stone building already reported by Krump and Browne (Fig. 3 and 4). He mentioned engravings of «Greek or Copt writings» on the walls, specified that the structure was made of sandstone stones cemented by lime mortar, remarked that two fossil trunks formed the architrave of the main entrance (Fig. 4), added that the interior was composed by eight small rooms and finally referred that his guides told him the story of the famous «warrior princess» Selima after whom the oasis was named a long time before (Cailliaud, 1823-1827).

After Cailliaud, apart from some occasional travellers direct-

ed to Darfur, Hodgson in 1903 and T.A. Leach in 1925 visited and described the oasis. They estimated, more correctly than Cailliaud, that the date-palms in the oasis were 2000 to 2500. Leach also made a plan of the building, lying about 300 m to the SW of the southern group of palm trees, on the small crest of a knoll (Fig. 2). It measured 9.75 x 5.80 m and reached a height of 3.60 m at its highest point. According to him the building contained six small rooms, two of which supplied with small windows, and not eight as previously claimed by Cailliaud. He divided the construction into three building phases, but could not assign any dates to them, were they even approximate. In his article (Leach, 1926), F. Addison (Appendix II) speaks against the theory of a Christian origin when he argues that the building should be considered as older since it does not resemble any known Christian antiquity of the Nile Valley. He proposes the Roman period as an alternative.

Sir D. Newbold and W.B.K. Shaw's modern exploration by cars started in 1927 (Newbold, 1928; 1945; Newbold & Shaw, 1928; Shaw, 1929). They catalogued the enigmatic stone building as a possible ancient Christian convent, and they were followed by L.E. de Almásy in 1929 (Almásy, 1929; 1930; 1939), R.A. Bagnold in 1930 and 1932 (Bagnold, 1931; 1933; 1935; Monneret de Villard, 1935), H. Rhotert in

1933 during the Frobenius Expedition (Rhotert, 1952), and then again by Shaw in 1935, who collected several palaeolithic artefacts, and in 1938 by Sir Robert Mond's Expedition, who found some Roman pottery of the 4th century (?) AD, together with a sample possibly belonging to the Dynastic period (Bagnold *et al.*, 1939). In 1929 an Arab nomad who was digging for natrun in the vicinity of the building, related the fortuitous find of a mysterious underground room, possibly a tomb. He reported the discovery to the then Governor of Halfa Province, H.C. Jackson, who, in a letter addressed to the Khartoum Civil Secretary dated November 1930, wrote: «In the course of his work he came across an underground room with very slight decorations and broken pottery as well as a fire place which he states was used for melting gold» (Hinkel, 1979).

In more recent times, 1963, W.Y. Adams continued the archaeological surveys, but no archaeological diggings appear to have been carried out in the area to this day (Hinkel, 1979). Very recently, in 2001, the oasis and the area to the south were finally surveyed by a team of the University of Cologne directed by Rudolph Kuper (Kröpelin, 2004).

The rare pottery sherds belong to various periods, from the Dynastic (?) to the Meroitic to the Roman and ancient Christian (not Nubian, but rather the Aswan type), and also of course to the more recent Islamic times.

Inscriptions and *wasms* (ownership tribal marks or camel brands) are scattered all over the sandstone outcrop surrounding the building (Fig. 3 and 4). Newbold counted three Cufic inscriptions, a few Arabic inscriptions (Allah and personal names), both ancient and modern, a number of drawings of camels, horses, ostriches, people, and a certain quantity of schematic signs and geometric motifs that he considered tribal marks, either of ownership or of cabalistic inspiration. Furthermore, he catalogued a few inscriptions as reminiscent of the Tuaregs' *tifinar* writing (Newbold,



Fig. 3. The ancient stone building. The inscriptions are engraved on the rocks around it.

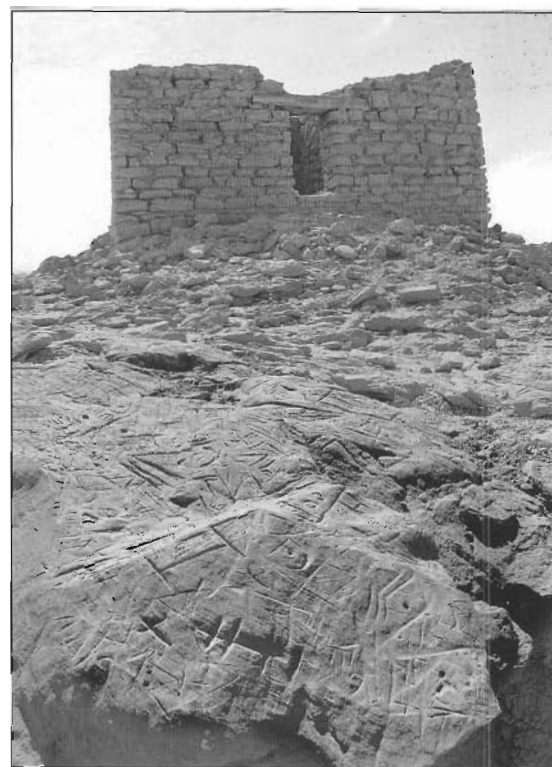


Fig. 4. The signs on a rock in front of the building. Note the fossil tree trunk forming the door lintel.

1928). Conversely, Rhotert described some engravings representing curved lines similar to renderings of footprints, and also some roughly executed animals and some well made depictions that he interpreted as throwing knives similar to those used in

Darfur and Kordofan, possibly of Tebu origin (Rhotert, 1952).

As far as the controversial identification of the ruins as a convent, it must be noted that, notwithstanding a careful search in a wide area around the building, no signs of possible Christian ori-

gin was found, let alone the «Greek or Copt writings» mentioned by Cailliaud. This appears to contradict the Christian attribution of the building, which was claimed, among others, by Newbold, Shaw and Monneret de Villard.

G.N.

Searching for possible script lines

Besides the predominant chaotic arrangements, we found at least 16 examples of arrangements of more than two signs in distinct vertical or horizontal lines (Fig. 5, 6, 7, 8). Of course a great uncertainty remains, especially on large panels with hundreds of signs such as no. 7. Nobody can unquestionably claim that the selected groups are intentional sign-sequences. We can only say that they *could* be intentional sequences and that they *look like* script lines.

To forestall criticism, we have selected 16 examples from thousands of signs, but these are all the possible lines we were able to find. We have not omitted one single line because it did not fit into the «system». The selected 16 arrangements consist of about 24

lines including 90 signs. Of course the numbers are too small to expect any exact statistical data, but if these lines represent script/language, most of the basis structures of possible scripts/languages should be represented. The examination proceeds with the following three steps.

1)
Does the inventory of signs from Selima correspond to any alphabet of the Semitic group of scripts?

Results of analysis

- There is no similarity with W-Semitic scripts (8% correspondence)
- There is a very small similarity with N-Semitic scripts (5-30%). It must be noted that the older the script, the greater the similarity.
- There is more similarity with S-Semitic scripts (30-40%). The greatest similarity occurs with the

so-called Thamudic and Safaitic scripts.

- There is a greatest similarity with the group of Libyco-Berber scripts (90%). Not with the recent alphabets (*tifinagh*), but with the ancient ones.

2)
What is the result of comparing the sign inventory from Selima with the «classical» alphabet of RIL (Chabot, 1940)?

Results of analysis

- With the exception of 3, the 90 signs are all well-known as signs (or at least variants) of the Libyco-Berber script represented in ancient times on thousands of tombstones in Northern Africa.
- Conversely, nearly all signs of the «classical» alphabet of the ancient Libyco-Berber script are present at Selima.



Fig. 5 and 6. Groups of chaotic signs on rocks.

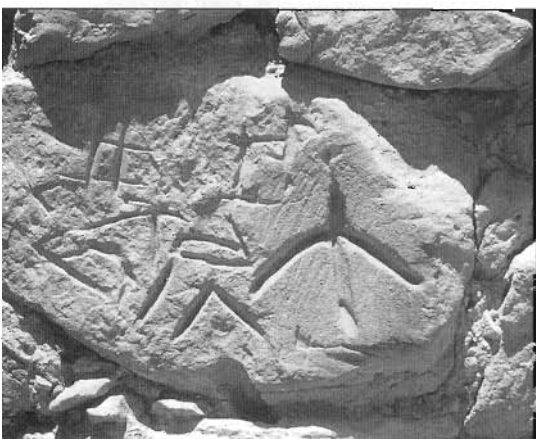
Differences:

1. $\uparrow\uparrow = K$, $\uparrow = G$ are missing, possibly replaced by signs like $\vee$ $\sqcup$ $\vee$.
2. Some signs for sibilants (H $\rightarrow$) are missing, possibly replaced by signs like H

The following observation is not surprising: «gutturals» (G, K) and «sibilants» (S, Z, Š, Ž) are the most instable signs and differ from region to region (same observations in Morocco and in the Canary Islands).

Considering the very small basis of 90 signs (one generally needs a few hundred to obtain reasonable results), there is an extraordinary concentration of signs at Selima. By collecting and counting 90 camel brands or tribal marks, one would never obtain similar results!

Fig. 7. Example of signs on the wall of the building.



3)

Is the frequency of signs consistent with the structure of a language related to Libyco-Berber scripts?

Preliminary remark

Of course we do not have any idea about the language that could be represented by the 'presumed' lines of Selima. We can only compare the frequencies of signs (= phonemes) with those of a well-known script complex, such as the corpus of RIL (Table 1). If signs for comparatively rare phonemes like F/P, Š, Ž will occur more frequently than the signs of commonly more frequent phonemes such as N, M or T, this would be a strong argument against the thesis of a script.

Results of the statistical analysis

- The four most frequent Libyco-Berber signs (according to RIL) are totally identical with the four most frequent Selima signs: $- = N$, $\sqcup = M$, $+ = T$, $\bigcirc = R$.

- Their frequencies are extraordinarily similar (RIL 8%-11% each, Selima 7-9%) with the exception of $- = N$: RIL 11%, Selima 24%. A reasonable explanation for this difference could be that the sign $-$ is (like the sign $\uparrow$) a particularly neutral one and so some of these straight lines very likely could not belong to the script lines.

- Comparing the next five signs we can see that four of them are identical: H , X , $=$, $\square$. In addition, their frequencies nearly perfectly correspond: RIL 5-8 %, Selima 4-5%.

- All of the six «constant signs»

(being present in an unchanged form from antiquity till recent times) are well represented at Selima: $- \sqcup + \bigcirc \sim =$.

- Extraordinary signs. Comparing the RIL alphabet, 5 signs still remain without an explanation, each of them occurring only once. Every epigrapher dealing with Libyco-Berber scripts has knowledge of such an observation, because every analysis of a corpus of Libyco-Berber shows this result: inscriptions of Central Ahaggar, Southern Morocco, Tripolitania, or the RIL collection itself. This may be explained either by the existence of local variants, or by mere mistakes made by the writers.

Conclusion

There is not the slightest indication against the thesis that the lines of Selima represent ancient Libyco-Berber script. The results of statistical analysis are the same as at any other corpus of lines well attested as Libyco-Berber. The analysis of an arbitrarily collected amount of tribal marks or camel brands would never reach such a high level of probability.

Of course it is extremely hypothetical to try any sort of reading of the presumed script lines at Selima oasis, especially using Libyco-Berber languages - as the site is so far away from the areas where these languages were used. However, we can add a final remark. Two sign sequences occur twice (an additional indication that the

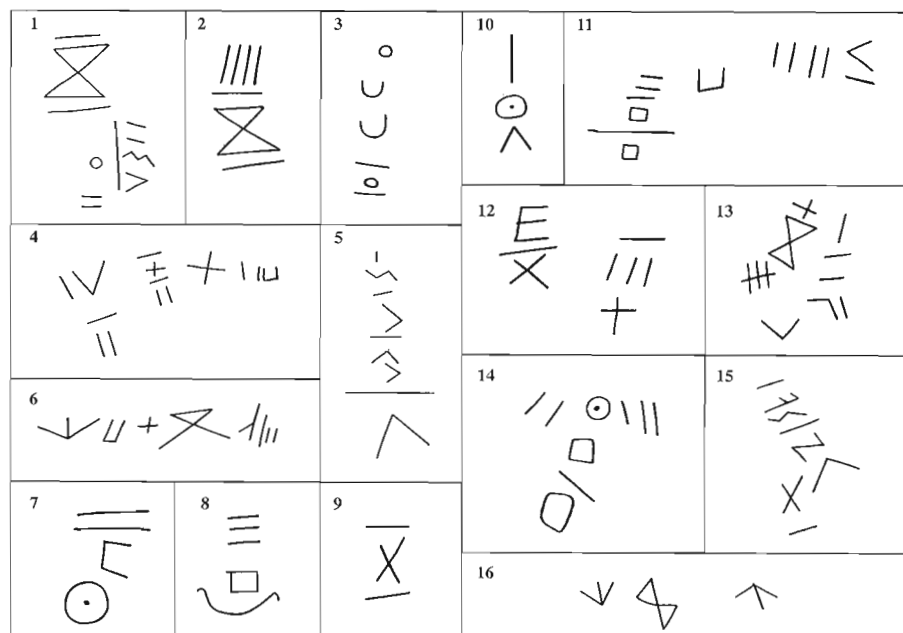


Fig. 8. Selima. Lines 1-16.

sequences were intentional!): — X — and — + —. If the transcriptions NSN and NTN are correct, both of them would correspond with personal names of North African inscriptions (RIL 977, RIL 827). One example of — + — is also preceded by the initial sign || = W. In North Africa this sequence would be translated as «son of NTN».

As said above, these considerations are very hypothetical. On the other hand, considering the remarkable role of the Libyan people in the history of Egypt, evidence of their presence in the eastern part of Africa is no great surprise.

King Merneptah, as early as in the 13th century BC, drove back an assault of the Libyan army, and so did Ramses III in the 12th century BC. During the following centuries a lot of Libyan warriors served in the Egyptian army. The apex of Libyan infiltration was in 945 BC, when a Berber called Scheschonq ascended the Egyptian throne and established the 22th Dynasty, a sequence of nine Libyan pharaohs who ruled over Egypt until 730 BC. We can assert that during this period and the following centuries quite a number of Libyan people lived not only in the oases of the Egyptian Western Desert but also far down to the south of the Nile valley. To this day, only one possible example of the Libyco-Berber script was found in north-east

Africa. The inscription of Khor Kilobersa was found in 1965 during the archaeological works to save the monuments of the Nile valley six kilometres south of Derr. The small rock panel shows four vertical lines in a rectangular frame. The lines consist of about nine different signs.

If you compare these signs with the inventory of all relevant alphabets (N-Arabic, S-Arabic, Old Ethiopic etc.) you can find only 4-5 correspondences. Especially signs consisting of two or three parallel lines are unknown in all these alphabets. So, if this inscription from Khor Kilobersa is not an example of a totally unknown script, it is with high probability a Libyco-Berber script. Almagro (1969) comes to the same conclusion.

The thesis that on the rocks of Selima oasis, in Northern Sudan, Libyco-Berber inscriptions have been engraved will cause astonishment and controversy. The official doctrine states that the border between Libya and Egypt is the eastern border of the Libyco-Berber territory. Is the conclusion that what is not allowed to be cannot exist? Or is it necessary to correct some established beliefs? A few years ago a discussion started about the existence of Libyco-Berber inscriptions out of the former limits, at Bahariah Oasis (Lemaire & Negro, 2000) and at Gizeh (Negro, 2001-2002). Has anyone searched for them in Tibesti or Ennedi? We think there

	Selima	RIL
—	24 %	11 %
+ x	9 %	9 %
○ □	9 %	8 %
□ ∇ ∪	7 %	11 %
□ <	7 %	5 %
≡	4 %	8 %
⊗	4 %	7 %
=	4 %	7 %
VI IV II	4 %	
	3 %	4 %
⊙	3 %	4 %
∨	3 %	6 %
∇	3 %	
	2 %	2 %
∧	2 %	
	2 %	2 %
⌘	1 %	1 %
≡	1 %	
∩	1 %	1 %
⌈	1 %	
⌊	1 %	
E	1 %	
∧	1 %	

Table 1. Signs of Selima and RIL.

is still a lot of fieldwork to do and that some surprises may result from the investigations.

W.P.

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