



ROCK ART, SCRIPTS AND PROTO-SCRIPTS IN AFRICA: THE LIBYCO-BERBER EXAMPLE

Jean-Loïc Le Quellec

It is infinitely more difficult and rare to discover and calculate an alphabet than to compose or let out a scream, a confession or a brief splendour ... I mean to say: a poem. I have searched and I am searching in the world—which is limited for a god but inexhaustible for a mortal—the fundamental, the number or, more specifically, the alphabet. This process is in vain. Too fortunate still if, during a quest that never accepted it, I happened to stumble over the poem.

– Roger Caillois, *Pierres réfléchies*, p. 15

Introduction

The oldest writing supports found to date are made of bone, terracotta and stone. This cannot preclude the fact that other short-lived or fast-disappearing materials could have been used. For this reason, we will never know anything about prehistoric expression on clay, hide, bark or sand, to mention only a few examples.

The existence of stone scripts justified the birth of epigraphy, which brought specialists to work on the large corpus of inscriptions in Greek, Latin, Gaulish, Phoenician, Punic, Egyptian, Arabic and Meroitic, among others. To date, the work of elaboration and translation is ongoing, as is sometimes the deciphering of the languages in which they are written. The age of these texts in general, their almost imperishable support and the fact that we find among them the oldest scripts in the world, have often encouraged another group of researchers—those who study rock art—to seek, in their own corpora, the origin of alphabetical or hieroglyphic systems that appeared later in the same regions. Indeed, according to them, their search for proto-scripts is all the more legitimate since it seems that these images have often been linked

to myths—i.e. etymologically speaking, to *muthoi*, ‘tales’—even if their meaning escapes us. We do not mean at this stage to identify what André Leroi-Gourhan called *mythogrammes*, i.e. an image layout making such stories visible—if not readable. Nor do we mean to identify ‘symbolic stenography’ as mentioned by Jacqueline Roumeguère-Eberhardt when she writes, concerning the rock art found in the region of Wedza in Zimbabwe, that

*... the abundance of animals on that rock face represents totemic groups as well as morphology, connoting all the major historical events such as battles [and] alliances. A young man's instruction consists in learning how to read the story of these events through that symbolic stenography—a support for the knowledge held by the guardians of traditions as well as the instructor who is specialised in the teaching of the story.*¹

In this case, the reading difficulty differs from that highlighted by Julia Kristeva:

*For those of us who belong to a cultural area in which a script is phonetic and literally reproduces phonetic language, it is difficult to imagine that a type of language—a script—could have existed and exists today for many peoples, and operates independently from the spoken chain which, as a result, is not linear (as is uttering), but which is spatial and as such registers a system of differences where each mark obtains a value according to its position in the written sequence.*²

These experts do not seek *mythogrammes*, logograms, ideograms or pictograms, but ‘pre-letters’ or ‘pre-hieroglyphs’ prefiguring a system of phonetic transposition, and therefore a ‘script’ in the strong sense of the word, which refers to ‘a group made up of graphic, minimal, recurring and combinable units transcribing the phonetic and semantic units of a given language’.³

Yet in Africa rock art is increasingly considered as historical documentation likely to bring us, for example, useful information on population history.⁴ In addition to the issue of dating, one of the problems posed by the study of rock art is that interpretation is generally very difficult and, save for fairly rare exceptions, we cannot just rely on the style, theme and repertoire of figures without taking their meaning into account. Yet, it is regularly suggested that certain rock displays could constitute a language, a proto-script we do

1 Jacqueline Roumeguère-Eberhardt, *Le signe du début du Zimbabwe. Facette d'une sociologie de la connaissance* (Paris: Publisud, 1982), pp. 127–28 (my emphasis).

2 Julia Kristeva, *Le langage, cet inconnu* (Paris: Seuil, 1974).

3 Joaquín Galarza & Aurore Monod-Becquelin, *Doctrina Christiana, Le Pater Noster* (Paris: Société d'Ethnographie (Recherches Américaines 2), 1980), p. 127.

4 Jean-Loïc Le Quellec, *Rock art in Africa. Mythology and legend* (Paris: Flammarion, 2004); Jean-Loïc Le Quellec, ‘Rock art research in southern Africa, 2000–2004’, in Paul G. Bahn, Natalie Franklin & Matthias Strecker (eds), *News of the world III*. Oxford: Oxbow Books, 2008d.

not—or barely—know how to recognise, but which would not be possibly any less decipherable one day, and which in any case would lead to a transition towards a true script, considered as being much more recent.

Therefore, at this stage, we will not linger over the rock images and inscriptions left by European settlers, a good South African example of this being the texts engraved on rocks during the Anglo-Boer War.⁵ These documents raise other questions, such as that concerning the line between ‘rock art’ and ‘graffiti’, the latter often being held up to public obloquy, when both are rich in ethnographic, social and historical information.⁶

I. Views of graphic language

A graphic language as evoked by rock art specialists can remain fairly vague. As such, the ‘almost a reading’ possibility was evoked by Marcel Otte in reference to Palaeolithic art, with the actual caves being considered ‘as a book’.⁷ Even more vague is the thesis of Emmanuel Anati, who thinks that, all over the world, rock images supposedly use only a limited list of graphemes, these always being the same and transcribing humanity’s unique first language. As wild as these imaginings can be, the seductive power of global interpretations is such that Anati’s thesis received the unexpected support of French palaeontologist Yves Coppens.⁸ More definite, while being as general, is the idea maintained by Paul Bouissac, who defends a ‘maximum semiotic hypothesis’ according to which art is ‘a true script, in a literal rather than a metaphorical sense’.⁹

Some archaeologists adopt similar ideas when studying particular sites. This is the case with the assertion by Narcís Soler Masferrer (and co-authors) concerning the pecked engravings on horizontal limestone blocs in Gleb Terzuz (North of Mijic, Western Sahara): ‘Signs and animals are linked, creating an enigmatic language.’¹⁰ With regard to other sites in the same region, in the area of Taref (near Bir Lehmar), the same authors became bolder and suggested the existence of a proto-script:

5 Sven Ouzman, ‘Koeka Kakie, hents op bokkor of ik schiet!’ Introducing the rock art of the South African Anglo-Boer War, 1899–1902’, *The Digging Stick* 16 (1999), pp. 1–5.

6 Sven Ouzman & Benjamin Smith, ‘Southern Africa’s Khoekhoen herder rock art’, *The Digging Stick* 21(3) (2004), p. 502.

7 Marcel Otte, *Préhistoire des religions* (Paris: Masson, 1993), p. 73.

8 Emmanuel Anati, *Les origines de l’art et la formation de l’esprit humain* (Paris: Albin Michel, 1989).

9 Paul Bouissac, ‘Beyond style: steps towards a semiotic hypothesis, in Michel Lorblanchet & Paul G. Bahn (eds), *Rock art studies: the post-stylistic era, or where do we go from here?* (Oxford: Oxbow Books 1993).

10 Narcís Soler Masferrer, C. Serra, E. Joan & U. Jordi, *Sahara Occidental. Passat i present d’un poble. Sahara Occidental. Passado y presente de un pueblo* (Girona: Universitat de Girona, 1999), p. 114.

*In these shelters we find rock art representations with an abundance of signs, animals and human representations. We do not know the meaning of these signs. They could be about cattle marks or about ritual or magic signs, or we could be dealing with signs associated with the origin of writing.*¹¹

Rüdiger and Gabriele Lutz, dealing with certain rock engravings from the Libyan Messak, deemed that they were ‘a first step towards hieroglyphic inscription’ and saw them as *ideogrammes*.¹²

This hypothesis deserves to be taken into consideration, since Africa has several native writings — the most famous ones being from Egypt — namely, hieroglyphic, hieratic and cursive or demotic writing. In Sudan, the ongoing deciphering of Meroitic texts concerns the oldest sub-Saharan written culture.¹³ In the Horn of Africa, we can mention Ge’ez alpha-syllabary and its derivatives, used to write Amharic, Oromo, Tigre and Tigrinya. During the 1950s, Shakh Bakri Sapalo invented a new system, better adapted to the specificities of the Oromo script, but the intervention of the authorities limited its usage.¹⁴ To write Somali, two scripts were invented in the 20th century: the Osmanya script, by Osman Yuusuf Keenadiid in 1920–22, and the Borama or Gadabuursi script, by Abdurahman Sheikh Nuur in 1933. The Vai syllabary, designed during the 1820s–30s by Dualu Bukele, was inspired by the Cherokee syllabary, created in America in 1819 and introduced in Liberia by a migrant of mixed race who had become an important chief;¹⁵ the Vai syllabary could have inspired the Southern Nsibidi ideograms from Nigeria.¹⁶ At the end of the 1800s, Flo Darwin, who went to study medicine in America, designed there the Bassa alphabet, which he introduced in Liberia on his return in 1910.¹⁷ In Cameroon, the Bamum or A-ka-u-ku syllabary was

11 Ibid, p. 133.

12 Rüdiger & Gabriele Lutz, ‘From picture to hieroglyphic inscription. The trapping stone and its function in the Messak Settafet (Fezzan, Libya)’, *Sahara* 5 (1992), p. 78.

13 Claude Rilly, *La langue du royaume de Méroé: un panorama de la plus ancienne culture écrite d’Afrique subsaharienne* (Paris: Honoré Champion 2007).

14 R.J. Hayward, & Mohammed Hassa, ‘The Shakh Bakri Sapalo syllabary and summary of the “Oromo orthography of Shaykh Bakri Sapalo”’, *Bulletin of the School of Oriental and African Studies* 44(3) (1981), pp. 550–56.

15 Konrad Tuchscherer & P.E.H. Hair. ‘Cherokee and West Africa: examining the origins of the Vai script’, *History in Africa* 29 (2002), pp. 427–86.

16 J.K. Macgregor, ‘Some notes on Nsibidi’, *The Journal of the Royal Anthropological Institute of Great Britain and Ireland* 39 (1909), pp. 209–19; Elphinstone Dayrell, ‘Further notes on Nsibidi signs with their meanings from the Ikom District, Southern Nigeria’, *The Journal of the Royal Anthropological Institute of Great Britain and Ireland* 41 (1911), pp. 521–40; H.H. Johnston & L.W.G. Malcolm, ‘Short notes on the syllabic writing of the EGâp—Central Cameroons’, *Journal of the Royal African Society* 20(78) (1921), pp. 127–29.

17 Helma Pasch, ‘Competing scripts: the introduction of the Roman alphabet in Africa’, *International Journal of the Sociology of Language* 191 (2008), p. 16.

invented by Sultan Ibrahim Njoya after he had seen Arabic texts, probably around 1903, and to fight against colonial domination. Certain characters of the Bagam script, which was used by the Eghap and is of obscure origin, stem from it.¹⁸ The Mende syllabary, called *ki-ka-kui* (from the name of the first three signs), was invented in Sierra Leone by Kisimi Kamara in 1921, explicitly to counter British power, attributed to the knowledge of writing. While this system, over time, did not resist the pressure of the Latin alphabet, around one hundred people were still using it in the 1990s, to translate Koranic texts in particular.¹⁹ The Kpelle syllabary, attributed to Chief Gbili de Sanoyea, in Liberia, was used mainly during the 1930s and the 1940s. The same goes for the Toma/Loma syllabary, invented in the 1930s by Wido Zogbo, from Boneketa, also in Liberia.²⁰ Several other African graphic systems are even more recent inventions: for example, the N’Ko script, which was elaborated in 1948 by Sulemana Kante to write down the Mandingue languages;²¹ or the Mandombe written form created by David Wabeladio Payi in 1978 following a revelation, and which is used in the Democratic Republic of Congo to transcribe Kikongo, Lingala, Tchiluba and Swahili.²²

It is worth noting that all the writing systems that appeared in Africa from the 19th century onwards were linked to colonial disruptions, and were very generally invented in reaction to the introduction of Latin characters. All their authors had been in contact with what was nicknamed ‘speaking paper’, and, having recognised its power, decided to endow their own people with it, very often after having a dream about it.²³ In some cases, inventing a new script, or reactivating an old graphic system, also represented a means to oppose governmental linguistic policies, as was the case for Oromo and Tifinagh to which I refer later.²⁴ These examples inform archaeologists by illustrating a process that could just as well have occurred in other contexts and at other times. In any case, they prove that contact between natives who do not know the script and newcomers who do can lead to the creation of new

18 Alfred Schmitt, *Die Bamum-schrift. 1. Text, 2. Tabellen, 3. Urkunden*, 3 vols. (Wiesbaden: Otto Harrassowitz, 1963).

19 Tuchscherer, ‘Cherokee and West Africa’.

20 Joseph Joffre & Théodore Monod. ‘A new West African alphabet: used by the Toma, French Guinea and Liberia’, *Man* 43(85) (1943), pp. 108–12; Pasch, ‘Competing scripts’, pp. 17–18.

21 Dianne White Oyler, ‘The N’Ko alphabet as a vehicle of indigenist historiography’, *History in Africa* 24 (1997), pp. 239–56, and www.nkoinstitute.com.

22 (Poireau 2004)

23 Sigismund Wilhelm Koelle, *Outlines of a grammar of the Vei language, together with a Vei-English vocabulary and an account of the discovery of the nature of the Vei mode of syllabic writing* (London: Kegan Paul, Trench and Trübner, 1854), pp. 235–36; Pasch, ‘Competing scripts’, p. 14.

24 Pasch, ‘Competing scripts’, p. 31.

scripts inspired by—but not calqued on—the systems being introduced. It is that ‘trans-cultural diffusion’ process via contact without direct transmission that has been called ‘stimulus diffusion’ by American anthropologist Alfred Kroeber.²⁵

II. The origins of the Libyan script

One of the African native alphabets, the genesis of which is still disputed, lends itself particularly well to the hypothesis of a script originating from earlier rock images. I refer here to the Libyan script that was used to write down ancient Libyan—which was mentioned by Herodotus²⁶—and its current descendant, the Tifinagh language, which, after more than two thousand years, is still used by the Tuareg.²⁷ The word ‘Libyan’ refers to the north of Africa, according to Greco-Roman usage, and Libyan texts from Numidia (current northern Tunisia and eastern Algeria) are generally contemporary with Carthaginian and Roman antiquity. A very large number of formulaary and repetitive Libyan inscriptions are found on funeral steles (Figure 3.1), where they are sometimes accompanied by Punic or Latin texts, whereas Tifinagh inscriptions (Figure 3.2) are very generally engraved or painted on rocks from central and central-southern Sahara.²⁸ The distribution area of these written forms (roughly, from the Canary Islands to Libya, and from the Mediterranean to the Sahel) covers that of current or vanished Berber dialects which they served, or still serve, to transcribe. The formation of the letters is based on the use of points, lines, circles and squares; their tracing is non-cursive; and they are placed vertically from bottom to top for Libyan texts, and vertically or horizontally for Tifinagh texts (and then from right to left, or vice versa, or using boustrophedon [bi-directional] or even spiral writing). This type of alphabet and its current variations, around ten of them, only note consonants and two semi-vowels which can take on a dot, such a dot being used only at the end of a word and generally having the value /a/, and sometimes /u/ or /i/. With the lack of space between words and the uncertainty of the reading direction, these characters make translation very difficult. The oldest attestation dated with certitude is a dedication engraved on a stele from Dougga (in Tunisia) going back to 138 BC,²⁹ but the possibility

25 Alfred L. Kroeber, ‘Stimulus diffusion’, *American Anthropologist* 42 (1940), pp. 1–20.

26 Herodotus, *The Histories*, Book IV, 155.

27 Mohamed Aghali-Zakara, ‘De l’origine et de la survivance des écritures libyco-berbères’, in Fantar, M’hamed Hassine & Ahmed Siraj (eds), *Débuts de l’écriture au Maghreb* (Casablanca: Publications de la Fondation du Roi Abdul-Aziz Al Saoud pour les études islamiques et les sciences humaines, 2005), pp. 85–90.

28 Lionel Galand, ‘Du berbère au libyque: une remontée difficile’, *Lalies* 16 (1996), pp. 77–98.

29 Jeannine Drouin, ‘Formules brèves et formes graphiques en touareg’ *Bulletin de Littérature orale arabo-berbère* 22–23 (1995), p. 37.

of an older usage, from the 7th to the 6th century BC, is perfectly tenable, even if it is not unanimously agreed on.³⁰

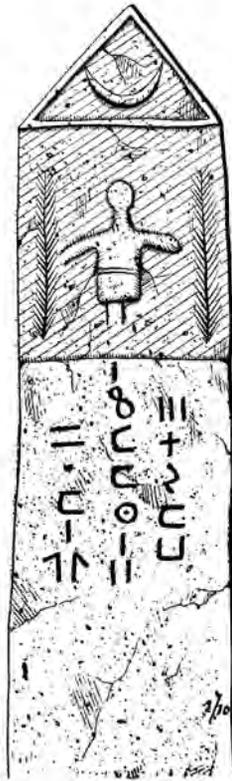


Figure 1.1 Example of stele with a Libyan inscription, discovered in 1853 in the Cheffia region (Algeria)³¹

The question of the origin of the Libyan script is still under debate. There are three theories in this regard: a) borrowing and adaptation from another ancient written form (Phoenician, Thamoudean, Safaitic or South-Arabic), b) autochthonous creation from a stock of ancient signs, and c) a mixture of the two previous theories, with borrowing from the script *idea* and from Phoenician signs, the alphabet then being complemented with a stock of ancient local symbols. Going over all three theories, Salem Chaker and Slimane Hachi

30 Gabriel Camps, 'Recherches sur les plus anciennes inscriptions libyques de l'Afrique du Nord et du Sahara', *Bulletin archéologique du Comité des Travaux historiques et scientifiques* 10–11 (1974), pp. 143–66.

31 After Jean-Baptiste Chabot, *Recueil des inscriptions libyques* (Paris: Imprimerie Nationale, 1940), p. 49.

have concluded that ‘the Libyan graphic material is largely autochthonous and certainly stems from Berber pre-/proto-historic geometric art’. For them, the source of that material should be sought in the marking, identification signs, ornamentation and magico-religious signs used previously, and which are still used nowadays at times. These authors suggest even the possible ‘existence of an embryonic form of pre-alphabetical script, with a limited stock of *ideogrammes*, reconverted afterwards in alphabetical signs’.³² The idea of a re-functionalisation of some ancient material as suggested by the writing practices of the Phoenicians/Punics is ancient, since James G. Février thought that we ought to search for the origin of the Libyan script in ‘an old local repertoire: tribal tattoos, marks of ownership, signs engraved on freestones’.³³ And way before him, Oric Bates deemed that ‘it may be safely concluded that the Libyans borrowed from the Phoenicians a few letters and the idea of writing, and that they added to the borrowed letters enough owner’s marks to make an alphabet, rude, but suited to their simple needs’.³⁴



Figure 1.2 Example of Saharan inscription in Tifinagh characters, Algerian Tadrart

32 Salem Chaker & Slimane Hachi, ‘À propos de l’origine et de l’âge de l’écriture libyco-berbère. Réflexions du linguiste et du préhistorien’, in Chaker, Salem & Andrzej Zaborski (eds), *Mélanges offerts à Karl-G. Prasse* (Paris & Louvain: Peeters, 2000), p. 11.

33 James G. Février, ‘Écritures libyques et ibériques’ in James G. Février (ed.), *Histoire de l’écriture* (Paris: Payot, 1959), p. 325.

34 Oric Bates, *The eastern Libyans: an essay* (London: Macmillan, 1914), p. 86.

For Malika Hachid,

*... it is first of all among the Capsians of the Maghreb, more than 10 000 years ago, and among the Bovidian Proto-Berbers of the Sahara, 7000 years ago already, that we need to look for that old stock of varied signs, then among the oriental and Saharan Libyans of the beginnings of history. It is in that iconographic melting pot that certain graphic socio-religious elements are found [...] and progressively became open to the implementation of a sort of primary ideographic language. It is only with the Garamante Palaeo-Berbers that this primary system moved towards a scriptural form that ended in the first writing characters.*³⁵

Drawing attention to the fact that in Ekaden Ouachèrene (= Ikadnouchère, Tassili-n-Azjer), a magnificent painting of a quadriga (two-wheeled chariot) surrounded by several inscriptions was dated quite convincingly to the 6th–5th centuries BC,³⁶ she deduced that the document ‘offered a record of the characters of a Libyan Saharan alphabet during that period’.³⁷

Yasmina Djekrif reckons that the signs of the Libyan script ‘are part of the repertoire of the designs relating to Berber art used in pottery decorations and tattoos’, and recalls in this regard that ‘basic figures have been pointed out a long time ago: crosses, points, sets of lines [and] circles accompanying animals on certain rock engravings of Neolithic tradition’.³⁸

In a text as elegant as the Tassili paintings on which he commented, Slimane Hachi set out that

*... the most recent horse or camel phases, of less than 4000 years old, went down the stylisation and schematisation road. Drawings, becoming increasingly plain, were reduced to basic lines to express, contrary to the previous phase, realities that were less numerous, less diversified and, at first sight, more trivial. The graphic drift we can observe here seems to go with the fact that representation was following a semiological direction. Further on, the slim-waisted elegant women of Tamadjert, with a proud bearing and theatrical body movements are part of the trip, with their slender necks and definite energy; they look at you, placing their long hair behind their necks and overwhelming you with the insolence of their eternal youth. It is most likely in this movement that one should look for the origin of the first signs of the North African script, the Libyan script.*³⁹

The theory according to which Libyan writing could be autochthonous, and to which I will soon return, is shared by Ginette Aumassip: ‘First of all, seen

35 Malika Hachid, *Les premiers Berbères: entre Méditerranée, Tassili et Nil* (Algiers/Aix-en-Provence: Ina-Yas/Edisud, 2000), pp. 185–86.

36 Andreas Müller-Karpe, ‘Eine quadriga-darstellung in der zentral-Sahara (Nachtrag von Otto Rössler)’, *Beiträge zur allgemeinen und vergleichenden Archäologie* 2 (1980), pp. 359–79.

37 Hachid, *Les premiers Berbères*, p. 174.

38 Yasmina Djekrif, ‘L’épigraphie libyque’, *Forum de l’Enseignant (ENS Constantine)* 3 (2007), p. 23.

39 Slimane Hachi, ‘Djanet, mirage miraculé’, *L’année patrimoine* (2003), p. 37.

as a derivative of Punic script, the oldest alphabetical script after Ougarit and which was spread by Phoenician trade, in North Africa in particular, the Libyan script seems to find its origin more in some old local collections of tattoos and local marks of ownerships.⁴⁰

Mohammed Aghali-Zakara, who deems that we ‘can imagine that a set of iconic signs of pictographic origin, used as markers, *aides-mémoire*, aesthetic marks and marks of ownership, have evolved and that figurative signs became phonetic’⁴¹, also agrees with this theory.

Finally, while Lionel Galand does think that ‘Libyan materials were, for most, created in Africa where, besides, we often find them utilised in varied ways, [such as] tattoos, pottery decorations [and] animal marks’, he still tempers this opinion by reminding us that the Tuareg do not seem to relate this set of signs with their script.⁴² In fact, he expressed this opinion several times, writing as early in 1996:

*Personally, I think that, as does Camps (Camps 1960: 269-274), Libyco-Berber scripts result from successive adaptations carried out on symbols or signs in use among African populations, e.g. tattoos or animal marks, even if, as shown by a recent study (Drouin 1995: 66), the Tuareg do not actually make the link.*⁴³

III. Libyan script and rock art

In 2002, Salem Chaker reiterated that ‘the general forms of the Libyan script (geometrism) are perfectly in line with the geometric figures and symbols of North African proto-historic rock art (paintings and engravings) and with the geometric decoration of Berber rural art’.⁴⁴

The idea that the origin of Libyco-Berber scripts—a term we use here to group ancient Libyan script and ancient or current Tifinagh script⁴⁵—is endogenous, as such presupposes the existence of a proto-script to be sought among ceramic and furniture decorations, tattoo and weaving designs, the wall ornamentation of houses and rock images. Could it be that, in the face of all these documents, we find ourselves in the same situation as that of the

40 Ginette Aumassip, ‘La période caballine, un renouveau de la vie saharienne’ in *L’Algérie en héritage. Art et histoire* (Arles: Actes Sud, 2003), p. 56.

41 Aghali-Zakara, ‘De l’origine et de la survivance des écritures libyco-berbères’, p. 86.

42 Lionel Galand, ‘Un vieux débat: l’origine de l’écriture libyco-berbère’, *Lettre de l’AARS* 20 (2001), p. 2.

43 Galand, ‘Du berbère au libyque’.

44 Salem Chaker, ‘L’écriture libyco-berbère. État des lieux, déchiffrement et perspectives linguistiques et sociolinguistiques’. Colloque annuel de la SHESL, Lyon-ENS, 2 February 2002, p. 5.

45 Lionel Galand, ‘Petit lexique pour l’étude des inscriptions libyco-berbères’, *Almogaren* 23 (1992), p. 123.

overwhelming majority of 16th- and 17th-century Spanish scholars—the likes of Hernan Cortes, Diego Durán, Gregorio García, Jerónimo de Mendieta and Bernardino de Sahagún—who, unable to recognise indigenous Mexican scripts which did not use any Latin, Greek or Hebraic letters, only saw *pinturas, figuras, signos, señales, efigies* and *imágenes* in them?⁴⁶ Bernardino de Sahagún thought, for example, that the Indians ‘had neither letters nor characters, that they did not know how to write and that they communicated among themselves by means of figures and images’.⁴⁷

Relatively speaking, the texts quoted above seem to reckon that the majority of rock art specialists are actually in a comparable situation: unable to recognise anything other than ‘images’, they do not know how to identify in them the emergence of a script. Yet, irrespective of what we think as far as the ideas they set out are concerned, these texts share an essential feature: their authors merely *suggest* the existence of a pre- or proto-script, or a relation between certain rock signs and letters from the Libyan alphabet, without proving any of it.

This alphabet contains between 22 and 24 signs, transcribed with their variants as they appear depending on the orientation of the inscriptions (Figure 1.3).

LIGNES HORIZONTALES de haut de droite à gauche.	LIGNES VERTICALES de haut de bas	TRAN- SCRIPTION PEUQUE.	NOTES TRAN- SCRIPTION.	LIGNES HORIZONTALES de haut de droite à gauche.	LIGNES VERTICALES de haut de bas	TRAN- SCRIPTION PEUQUE.	NOTES TRAN- SCRIPTION.	LIGNES HORIZONTALES de haut de droite à gauche.	LIGNES VERTICALES de haut de bas	TRAN- SCRIPTION PEUQUE.	NOTES TRAN- SCRIPTION.
⊙	⊙	⤴	B	⤴	∨	∨	I	⤴	⊙	∨	Q
∨	⤴	∧	G	≡	∩	∩	K	÷	⊙	∨	Q
∩	∩	∨	D	∩	≡	≡	L	⊙	∩	∨	R
≡	∩	∨	U	∩	∩	∩	M	≡	∩	∨	S
∩	∩	∨	Z	∩	∩	∩	N	+	∩	∨	T
H	∩	∨	Z	∩	∩	∩	S	∩	∩	∨	T
-	∩	∨	Z	∩	∩	∩	F	∩	∩	∨	H
∩	∩	∩	T	∩	∩	∩		∩	∩	∩	

Figure 1.3 The Tifnagh alphabet

In accordance with the endogenous origin theory, it appears indeed that some of these signs are identical to marks currently in use. Thus, in the extreme

46 Anne-Marie Vie-Wohrer, ‘Découverte des écritures indigènes au XVI^e siècle dans le Mexique central’, *Amerindia, revue d’ethnolinguistique amérindienne* 19-20 (1995), pp. 421–31.

47 Bernardino de Sahagún, *Historia general de las cosas de Nueva España*, 4 vols (Mexico: Porrúa, 1969), Book III, 165.

south of Tunisia, P. Pillet⁴⁸ pointed out that families identify their camels thanks to such marks: ○ (*holga*: ‘the ring’), ◻ (*holga mefta*: ‘the open ring’), | (*metreg*: ‘the vertical bar’), — (*semta*: ‘the horizontal bar’). Ali Zouari pointed out that these signs and the names given to them are, in the town of Sfax, similar to those incised on the round loaves that families give to bakers for baking as a means of identifying which breads belong to whom.⁴⁹ Similarly, Mark Milburn pointed out that the Tubu of the Tibesti use camel marks that are also comparable to certain alphabetical letters, and which can be found engraved, separately or in sets, on rocks:⁵⁰ □ (‘the donkey hoof’); ∞ (‘the assegai fight’); ∇ (‘the crow leg’); ∞ (‘the sinuous rope’ — cf. the ancient Libyan ∞); † (‘the goat herder’s crook, to catch pods in trees’). The author establishes a link between these signs and those of an enigmatic inscription copied at er-Roui by Burthe d’Annelet.⁵¹

As for Salem Chaker and Slimane Hachi,⁵² they draw attention to how close Libyan letters are to the ownership marks of the Tuareg of Ahaggar, which were inventoried by Father de Foucauld (Figure 1.4), and the fact that some of these marks are sometimes found on tombstones.⁵³

Iddir Amara has also pointed out the graphic proximity of certain Libyan or Tifinagh letters to geometric figurations, such as the ithyphallic figure ‘z’, adding that ‘the triangle, the quadrangular sign, the chevron, the parallel or crossed lines [...] can represent the matrix from which the Libyan alphabet was shaped’.⁵⁴ He attached great importance to the ‘T’ sign engraved on the shoulder of a bovine from Khanget el-Hadjar in the south of Constantine (Algeria): since it matches the letter /S/ of the Libyan alphabet, Iddir Amara intended to read in it the word *eSu*, which designates the ox in Tuareg, and in this saw a confirmation ‘of the age of the language and the presence of certain primitive alphabetical signs’.⁵⁵ In Guerrar el-Hamra, according to him, another image seemed to go in the same direction: the representation

48 C.P. Pillet, ‘Les marques de chameaux dans l’extrême sud Tunisien’, *Revue tunisienne* 108 (1915), 234.

49 Ali Zouari, *Les relations commerciales entre Sfax et le Levant aux XVIIIe et XIXe siècles* (Tunis: Institut national d’Archéologie et d’Art, 1990).

50 Mark Milburn, ‘Sur quelques inscriptions énigmatiques des confins Nigéro-Fezzanais’, *Le Saharien* 91 (1984), p. 25.

51 Jules-Louis-Charles de Burthe d’Annelet, *À travers l’Afrique française*. 2 vols (Paris: Firmin-Didot, 1939).

52 Chaker & Hachi, *À propos de l’origine et de l’âge de l’écriture libyco-berbère*, p. 11.

53 Edmond Bernus, ‘Marques de propriété touarègues et pierres tombales (plaines au sud-ouest de l’Aïr)’, *Sahara* 8 (1996), pp. 7–17.

54 Iddir Amara, ‘Nouvelle approche de l’art rupestre de l’Atlas saharien: les figurations de la période tardive’, *L’Anthropologie* 107 (2003), p. 553.

55 Iddir Amara, *L’art rupestre dans le sud-ouest de l’Atlas saharien (Algérie): étude analytique et typologique des figurations de la période récente* (Paris: Panthéon-Sorbonne, 2001), p. 209.

of an extremely schematic horse which he believes to be associated with the two letters 'll' — /W/ and □ /S/. Supposing that the neck of the animal represents a /Y/, Amara then reads the word YWS as 'horse'.⁵⁶ Finally, he interprets extremely schematic representations of horsemen as resulting from the association of the Libyan letters Π (/Z/), divided in two to form the horse's legs and tail, and 'l' (/N/) placed above to figure the horseman.⁵⁷

⌌	<u>ameslag</u> (āmeslēg) "fait de séparer réc. l'un de l'autre". — <u>éhouel</u> de la famille des Imenân.
Y	<u>tāgettīout</u> "bâton fourchu". — <u>éhouel</u> de la tribu des Kel-Āmeḡd.
>	<u>tēkkilt</u> n. <u>āhenkoḡ</u> "empreinte de pied de gazelle". — <u>éhouel</u> d'une fraction des Soulemmeden.
†	<u>ader</u> n. <u>āxaleg</u> "pied de corbeau". — <u>éhouel</u> d'une famille des Dāg-Rāli.
≡	<u>ied</u> (nom d'une lettre de l'alphabet). — <u>éhouel</u> de la tribu des Kel-āhem-mellen.
==	<u>āmelked</u> (sans sign.; <u>Velked</u> "solliciter avec de douces paroles"). — <u>éhouel</u> d'une fraction des Ifōras de l'Āj.
^	<u>ēgeid</u> (sans sign.). — <u>éhouel</u> de la tribu des Iḥadānāren.
	<u>Təouerouert</u> "celle des Ioueroueren" (np. fs.). — <u>éhouel</u> de la tribu des Ioueroueren.
l	<u>tākoumt</u> "petite tige en fer à bout croché". — <u>éhouel</u> d'une fraction des Ifōras de l'Āj.
∪	<u>ēor</u> "lune". — <u>éhouel</u> d'une famille des Tēgché-mellet.
T	<u>ēref</u> en <u>tākouba</u> "poignée d'épée". — <u>éhouel</u> d'une fraction arabe du Tidikelt.
o	<u>lāouīnest</u> "anneau". — <u>éhouel</u> d'une fraction des Ifōras de l'Ād.
3	<u>āsemōi</u> n. <u>tāchelt</u> "logement dans le sable de vipère". — <u>éhouel</u> (possesseur inconnu).
7	<u>asaoua</u> "manche d'ermine". — <u>éhouel</u> de la tribu des Kel-Iriḡer.
—	<u>Tākouremoit</u> "celle des Ikerremoiens" (np. fs.). — <u>éhouel</u> de la tribu des Ikerremoiens.
—	<u>Tānembout</u> "celle des Inemba" (np. fs.) [appelée aussi <u>tāmādel</u> (sans sign.; <u>Vāmādel</u> "mâchoire")]. — <u>éhouel</u> de la tribu des Inemba.
=	<u>tēhnéoum</u> "jumelles". — <u>éhouel</u> de la famille des Dāg-Āmallal.

Figure 1.4 Table of Tuareg marks from the Ahaggar area⁵⁸

56 Ibid., pp. 352–53.

57 Ibid., p. 210.

58 Charles de Foucauld, *Dictionnaire abrégé Touareg-Français de noms propres (dialecte de l'Ahaggar)*. (Paris: Larose éditeurs, 1940), p. 629.

All these arguments can be summarised in three main points:

- The progressive stylisation, schematisation and geometrisation of Saharan rock art prepared the ground for the appearance of Libyan script.
- Certain signs used for tattoos or ceramic and furniture decorations, testify to this process.
- A few signs associated with rock images specifically show the birth of the Libyan script.

The problem is that none of these points can stand up to specific examination.

The progressive stylisation and schematisation of rock images from the Sahara has often been referred to, and Alfred Muzzolini has mentioned in this regard the slow ‘secularisation’ of art.⁵⁹ Although these notions of ‘stylisation’ and ‘schematisation’ required details, every author in question agreed to that the horse and camel images were indeed more ‘schematic’ than those left by older pastoral populations. We need to think about this finding because, on the one hand, this phenomenon is noticeable especially during the camel period—therefore *after* the appearance of the Libyan script—and, on the other hand, because of the fact that truly geometric figures are very rare. To give weight to the theory being defended, we need to show that, during the horse period preceding the camel period, such figures would have been multiplied, becoming increasingly abundant before the appearance of writing—which is then supposed to have recycled some of them. Yet, this is not the case. In fact, there is no record of the progressive appearance of signs, followed by their progressive geometrisation up to their becoming letters—contrary to what can be seen, for example, in Mesopotamia.

The example of the quadriga from Ekaden Ouachérène/Ikadnouchère in particular, as put forward by Malika Hachid, certainly does not point in the direction of progressive geometrisation, since it is beautifully drawn, with wide curves that cannot be qualified in any way as being ‘schematic’, and even less as ‘geometric’, since the quadriga’s painter made good use of perspective. While painted or engraved images showing non-schematic horses, probably associated with inscriptions, are possibly not as rare as

59 Alfred Muzzolini, ‘Le profane et le sacré dans l’art rupestre saharien’, *Bulletin de la Société Française d’Égyptologie* 124 (1992), pp. 24–70.

has been mentioned,⁶⁰ only the most recent ones show schematic animals or animals reduced down to angular geometric drawings.⁶¹ As such we cannot continue to assert, without the support of a solid—not yet produced—documentation, that Libyan inscriptions supposedly mark ‘the result of a long process of schematisation of rock engravings’.⁶²

IV. Signs as a proto-script

In the argumentation exposed here, resorting to signs used for tattoos or ceramic and furniture decoration has never been clearly documented, and is practically always limited to a simple claim. Yet, two noteworthy series of exceptions exist. One is given by Gabriel Camps, who reports signs marked on pottery pieces from Sila and Germa—although isolated signs certainly cannot prove the existence of a script. Potentially more convincing are the three signs **▷□○** painted on a vase from Tiddis going back to the 3rd century BCE,⁶³ although, again, this is a possibility and not a proof. Indeed, we absolutely need to keep in mind this warning from Lionel Galand: ‘One or two isolated signs can indeed have a symbolic value and transmit a message, but they do not necessarily imply the existence of a script. They only become “letters” if they undoubtedly belong to an alphabet, within which they are opposed to other letters to form a structured set’.⁶⁴ Unfortunately, making a discovery creates enthusiasm that regularly leads one to forget this word of caution, as happened to ethnologist Marceau Gast; after examining four signs engraved on the abutment of a window in a ruined building in St-Hilaire near Banon, in Haute-Provence, he wrote ‘it is certain [...] that these are ancient Libyco-Berber signs that can date back to the Middle Ages’,⁶⁵ when nothing was less certain. The other exception is given by Malika Hachid, who produced the photography of painted Kabyle pottery (with, in particular, a series of **w** aligned

60 Malika Hachid, ‘Du nouveau sur le monument d’Abalessa (Ahaggar, Algérie). De la date de l’introduction du dromadaire au Sahara central, du personnage d’Abalessa et des inscriptions rupestres dites ‘libyco-berbères’, *Sahara* 17 (2006), pp. 95–120; Jean-Loïc Le Quellec, ‘À propos d’un site à gravures de la Tadrart algérienne: récurrences d’une association image-inscription’, *Les Cahiers de l’AARS* 11 (2007), pp. 125–36; Werner Pichler, ‘A propos “Association”’, *Rock Art Research* 25(1) (2008), pp. 117–19; Jean-Loïc Le Quellec, ‘From co-occurrence to association’, *Rock Art Research* 25(1) (2008c), pp. 119–21; Jean-Loïc Le Quellec, ‘Du neuf avec de l’ancien: à propos des gravures et inscriptions du monument d’Abalessa’, *Sahara* 19 (2008a), pp. 178–83; Jean-Loïc Le Quellec, ‘En suivant monsieur Akha (ou Agha) de la Tadrart au Messak’, *Les Cahiers de l’AARS* 12 (2008b), pp. 161–69.

61 Cf. for example Hachid, *Les premiers Berbères*, pp. 176–177.

62 Amara, *L’art rupestre dans le sud-ouest de l’Atlas saharien (Algérie)*, p. 214.

63 Gabriel Camps, ‘Écriture libyque’, *Encyclopédie berbère* 17 (1996), p. 2571.

64 Lionel Galand, ‘La datation des inscriptions. Pour une évaluation des critères linguistiques’, *La Lettre du RILB* 11 (2005), p. 1.

65 Marceau Gast, ‘Une pierre gravée singulière à Banon’, *Actualité des Alpes de Lumière* 58 (1993).

vertically) accompanied by the following legend: ‘Berber geometric art, which could have inspired Libyan written form, will be preserved up to today in popular art (weaving, tattoos, rock paintings, wooden sculptures, jewellery ...).’⁶⁶ Yet, even by finding many more examples, the proposed theory would not be reinforced for all that. Indeed, one cannot transpose into the past an extremely recent image (19th–20th centuries) by supposing its decoration to be behind a tradition of which, in fact, it is only, at best, the result! There again, it would be important to have at one’s disposal ancient documents showing: a) the progressive geometrisation of recognisable iconic figurations; and b) the re-use, within a graphic system, of geometric signs thus obtained. Yet, Gabriel Camps, in a brilliant work, carried out a meticulous analysis of the decoration found on ancient Berber ceramics. From this work, it emerges that only five vegetal and aviform designs were identified which could meet the first condition, that of a progressive geometrisation. But in actual fact, only one really illustrates an evolution leading from an iconic design (a bird) to a geometric form not immediately recognisable as being an animal, and none of them can be related to any of the letters of the Libyan alphabet (Figure 3.5). Besides, whether on the pieces of pottery or the weavings and wall decorations of houses from Kabylie, Ghât or Ghadamès, the major tendency of the Berber schematisation of animal and anthropomorphic figures leads to triangular forms⁶⁷ — which can only be found on two letters (⌘ and ⌘) of the alphabet supposed to derive from it. A more recent study, by Jacques Fontanille, suggests the possibility of a ‘shared foundation’ or ‘direct relation’ between the corpus of decorative elements of proto-historic Berber pottery and Libyan script, and concludes that it would be very difficult to confirm such a possibility.⁶⁸

As far as tattoos are concerned, ancient testimonies are obviously extremely rare. But on examining the Egyptian representations of Lebū and Temehū, or ‘Eastern Libyans’, from the tomb of Pharaoh Seti I (19th dynasty) and Medinet Habou (20th dynasty), we find that their many body marks do not match any of the signs of the Libyan alphabet,⁶⁹ except for a double line on the forearm of one of these characters — although a mark formed by two parallel lines is so commonplace that nothing can be concluded from it, especially since it is the only one here. The mark appears several times on the skin of Ötzi, the man who was discovered in 1991 in a

66 Hachid, *Les premiers Berbères*, p. 165, fig. 252.

67 Gabriel Camps, *Aux origines de la Berbérie. Monuments et rites funéraires protohistoriques* (Paris: Arts et Métiers Graphiques, 1962), pp. 378–80.

68 Jacques Fontanille, ‘Décoratif, iconicité et écriture. Geste, rythme et figurativité: à propos de la poterie berbère’, *Histoire de l’art et sémiotique* 3(3) (1998), p. 15.

69 Hachid, *Les premiers Berbères*, pp. 95–97.

glacier in the Italian Dolomites and dated to 5300 BP.⁷⁰ For the same reason, we cannot call upon the body decorations of Iheren-style characters, which consist of parallel lines, chevrons and Ç aligned vertically,⁷¹ and for which the fact that they were tattooed rather than painted cannot be proved. As such, it appears that regularly mentioning tattooed signs as the possible source of the Libyan alphabet relies, in fact, only on an actual or sub-actual documentation, unduly transposed to the past.

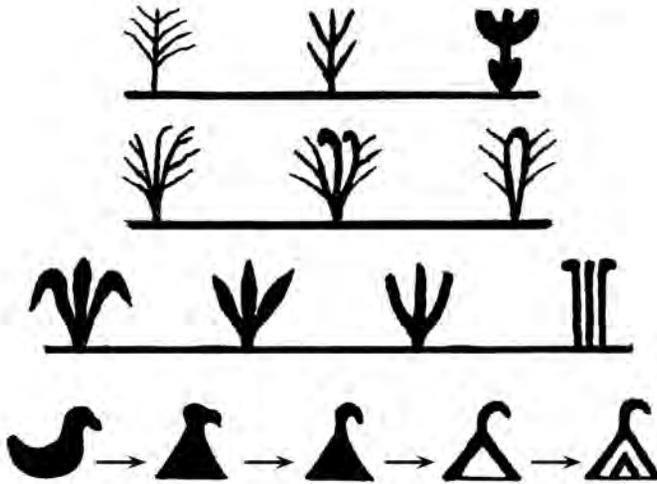


Figure 1.5 Progressive geometrisation of four types of iconic signs used to decorate Berber pottery⁷²

As for the ownership signs used to mark animals, Salem Chaker and Slimane Hachi say about them:

... writing must have progressively emerged from previous practices: animal marking, tattooing, engraving and rock decorating, all the practices in which we find forms that are strangely similar to the characters of the Libyco-Berber alphabet. To be convinced about it, we simply need to refer to the camel markings of the Tuareg from Kel-Ahaggar as published by Charles de Foucauld.⁷³

And yet no, such a reference cannot be sufficiently convincing, for these marks were recorded by Father de Foucauld at the very beginning of the 20th century and cannot testify to the existence of an equivalent practice supposedly older than the script. It is also very difficult to obtain information on the markings

70 Luc Renaut, 'Les tatouages d'Ötzi et la petite chirurgie traditionnelle', *L'Anthropologie* 108 (2004), p. 72.

71 For example, Hachid, *Les premiers Berbères*, p.74, fig. 102.

72 After Camps, *Aux origines de la Berbérie*, fig. 146.

73 Chaker & Hachi, 'À propos de l'origine et de l'âge de l'écriture libyco-berbère', p. 10.

used by pre- and proto-historic engravers and painters. Nevertheless, four parallel undulating lines visible on the cheek of an Iheren-style bovine from Wa-n-Derbawen (Tassili-n-Azjer), perhaps testify to such usage.⁷⁴ And the fact that the **Σ**, **Σ**, **∞** and **E** signs, all attested in the Libyan script and in Saharan Tifinagh inscriptions, also belong to the set of signs used by Lapp cattle breeders to mark their reindeer,⁷⁵ or that the signs **O**, **C**, **┌**, **+** and **✱**, also attested among Tifinagh inscriptions, are also Mongolian marks,⁷⁶ show the extent to which it is impossible to rely on simple isolated signs.

An examination of the available literature shows that the marks of cattle breeders, rock paintings, weavings, jewellery and *a fortiori* wood decorations can only benefit from an essentially ethnographic—not prehistoric—documentation. As such, it is difficult to see how recent signs, supposed resulting from a long evolutionary process, could be used as illustrations of their antique source!

V. The studies of Iddir Amara

From among all the authors mentioned previously, Iddir Amara is the only one who really tried to document the emergence of the Libyco-Berber script from rock images. The first example he gave, that of the letter ‘z’ with the value /Z/ in Tifinagh, and which is supposedly derived from rock figurations presenting ithyphallic men, is also mentioned by Salem Chaker and Slimane Hachi who write:

Some of the figures attested in the horse phase can clearly be found as alphabetical characters as well as Berber decoration designs which, we know it, are still receiving today a semantic interpretation (Cf. Devulder 1951, Moreau 1976, Makilam 1999). The most striking case is that of the anthropomorphic sign ✱, which manifestly represented and still represents a human being and has the value Z in the Tifinagh alphabet.⁷⁷

This example has no value, for two reasons: a) the letter ‘✱’ is only found in the Tifinagh and not the Libyan alphabet from which the Tifinagh alphabet derives—its appearance as a letter is thus relatively recent; b) contrary to the claims of the above-mentioned authors, this figure is only found in the camel phase context, not the horse phase:⁷⁸ as a result, it appeared too late to be behind a letter that came up before that. These are also the reasons

74 E Landais, ‘Le marquage du bétail dans les systèmes pastoraux traditionnels’, *Revue d'élevage et de médecine vétérinaire des pays tropicaux* 53(4) (2000), fig. 3.

75 *Ibid.*, fig. 1.

76 *Ibid.*, fig. 10.

77 Chaker & Hachi, ‘À propos de l’origine et de l’âge de l’écriture libyco-berbère’, p. 5.

78 Alfred Muzzolini, ‘Au sujet de l’origine de l’écriture libyque’, *Lettre de l'AARS* 19 (2001), p. 24.

for which its presence on an amphora of the 1st century found in Germa, the Garamantian capital, as interesting as it is, does not contribute to this debate—while indicating nevertheless that a variant of Tifinagh script (this letter being characteristic of it) was probably in use in the Fezzân at the time.⁷⁹

However, the fact that decorations ‘are still receiving today a semantic interpretation’, does not prove anything, since this interpretation could just as well correspond to the remotivation of symbols no longer understood. Moreover, the publications of the three authors mentioned by Salem Chaker and Slimane Hachi in support of their theory ought to be used cautiously. The famous work of M. Devulder established, for example, that the Ouadhias represent an egg with ... a white triangle, which jeopardises, to say the least, the hypothesis of the iconic origin of the signs.⁸⁰ Salem Chaker and Slimane Hachi actually specified in a footnote that the interpretations given by Jean-Baptiste Moreau and Malika Grasshof (who signs under the name ‘Makilam’), in their publications, ‘must be taken cautiously’.⁸¹ In my opinion, this is the least we can say, especially as regards ‘Makilam’⁸² who practises a type of reading based on Jungian, Durandian or Eliadian archetypes, on the basis of hasty generalisations and falsehoods thrust forward with such self-confidence that even honest researchers unfortunately do not fail to be favourably impressed by them.

The second example produced by Iddir Amara is that of the ‘I’ sign engraved on the shoulder of a bovine from Khanget el-Hadjar, in the south of Constantine (Algeria), which is supposedly an ‘s’ from the Libyan alphabet. This is indeed possible, but is not proved in the least. To say that, in addition, it supposedly refers to the word *eSu*, which designates the ox in present-day Tuareg, supposes that this term was already known in ancient Libyan, which is also possible but still not proved for all that. And that, from among the dozens of thousands of bovines represented in the Sahara and the Atlas, someone felt the need to write the word ‘ox’ on a bovine, is again possible, but very curious: the information thus added would have been perfectly redundant and unnecessary, as would the addition of the word ‘horse’ on a perfectly recognisable horse picture. Finally, the sign in question, compared to the bovine, is of another making altogether and must have been added much

79 Camps, ‘Écriture libyque’, p. 2572.

80 M Devulder, ‘Peintures murales et pratiques magiques dans la tribu des Ouadhias’, *Revue africaine* 426–427 (1951), pp. 63–102, fig. 40.

81 Chaker & Hachi, ‘À propos de l’origine et de l’âge de l’écriture libyco-berbère’, p. 5, n. 1.

82 Malika Grasshof, *Signes et rituels magiques des femmes kabyles*. 1st edition (Aix-en-Provence: Édisud, 1999).

later at an unknown date. As such, this example consists only of unverifiable hypotheses, i.e. the ‘**⌘**’ sign is supposedly ancient, refers to a Libyan letter, is read as *eSu* and designates an ox. Contrary to what the author claims, it is therefore impossible to consider this document as a confirmation ‘of the age of the language and presence of certain primitive alphabetical signs’.⁸³

A third example is that of an extremely schematic horse which is supposedly partly made up of the two letters **||** /W/ and **◻** /S/ (Figure 3.6). This reading is only possible if the document has been over-interpreted and manipulated in a rather acrobatic way. On the one hand, the script in which the author chose to recognise the letter **◻** /S/ could just as well be seen as an **◻** /S/ included in a **◻** (Libyan /M/), and on the other hand, the dot situated at the centre of the square might not be intentional, meaning that it could just as well have resulted from a wall alteration, on which other quite similar cups can be observed. Since Iddir Amara did not physically examine this wall himself but based his claim on a photo published by Malika Hachid, it is therefore impossible for him to prove that the said dot forms an integral part of the script.

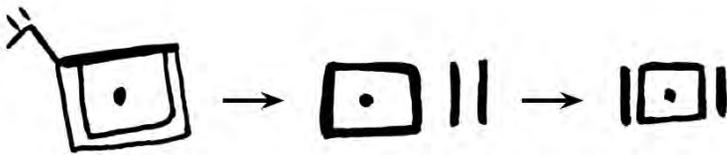


Figure 1.6 Breaking down a rock engraving into alphabetical signs⁸⁴

Finally, the ‘**||**’ sign in fact does not exist at all in the image under analysis: it is purely and simply constructed by the author, on the basis of some arbitrary breakdown. Moreover, even if it existed, it could only correspond to the value /L/ or /U/ in Libyan (depending on the orientation of the script). As a result, to read the word *aYiS* ‘horse’ on this image is wishful thinking, and this example is no more valuable than the previous ones.

The last example concerns a horseman whose mount is of the ‘pectiniform’ type (comb-shaped). To see in it the Libyan letter **𐍎** (/Z/) results from a breakdown as arbitrary as the previous ones, ignoring the fact that the **𐍎** and **𐍏** are also found in Libyco-Berber characters. Above all, pectiniform figures only appear in the camel phase, and to make of them the ancestors of a script that appeared during the previous period can only result from playing on words, by specifically attributing all horse images to the ‘horse phase’. This is possible only if we do not take into account the fact that horse

⁸³ Amara, *L'art rupestre dans le sud-ouest de l'Atlas saharien (Algérie)*, p. 209.

⁸⁴ After Amara, *L'art rupestre dans le sud-ouest de l'Atlas saharien (Algérie)*, fig. 56.

representations persist during the camel phase, and that a figure that could be referred to as being ‘caballine’ (horse-like) because it represents a horse, is not automatically ‘caballine’ (from the horse phase) in the sense of ‘period prior to the camel phase’. Therefore, like all the others, this example also comes to nothing.



Figure 1.7 Figures of pectiniform horsemen interpreted by Iddir Amara as compositions realised from Libyan letters⁸⁵

In fact this is not very surprising, for after having recalled that in the Anti-Atlas, in Tinzouline in particular, ‘signs from Western Libyan script are sometimes combined with small animal figurations (horse, dog, oryx) that seem to play the role of *pictogrammes*’, Gabriel Camps had firmly affirmed that we could not conclude anything from it as regards the origin of the script: ‘these *pictogrammes*, if they really play this role, cannot be used to support the theory of the in-situ birth of the Libyan alphabet by transformation of ancient ownership marks and other traditional scripts, such as those still found on tattoos.’⁸⁶

Thus, none of the three points of the previously mentioned arguments has the least demonstrative value. Not that they are *a priori* unacceptable, but they are simply not supported by any factual data. Therefore it falls to their advocates to document their claims if they are to maintain these.

But that is not all. Even if these three points could finally be proved—which I strongly doubt—it would not be sufficient to point out that ancient signs are found among the letters of a subsequent alphabet to prove the derivation of the latter from the former. Acting in this manner would equate to following a pseudo-reasoning of the *post hoc, ergo propter hoc* type. Indeed, two major difficulties would remain in that one would still have to prove that: a) these are not simple, and therefore ubiquitous, signs; b) the signs identified as such have a constant value and indeed form a system.

Yet, these two conditions seem, this time *a priori*, extremely difficult to verify, for two reasons:

⁸⁵ After Amara, *L'art rupestre dans le sud-ouest de l'Atlas saharien (Algérie)*, fig. 56.

⁸⁶ Camps, ‘Écriture libyque’, p. 2568.

- a) The signs being sourced are of the simplest types: dots and lines (simple or multiple), circles and squares, rounded or angular arches, crosses, diabolos and zigzags. While there is a basic principle according to which the simpler a sign, the more it is likely to spread and receive different values, these signs are actually the ones that are found everywhere, at all periods, with the most diverse values and meanings. The only way to avoid this problem would be, therefore, to work on recurrent *associations* of identical signs not found on the most ancient rock testimonies.
- b) Strictly speaking, the value of pre- and proto-historic Saharan rock signs is unknown, and can only be so in the absence of testimonies of painters and engravers. Any interpretation of rock images, as interesting as these can be, can only be a product of assumption, and any hypothetical constancy of the value of certain signs therefore remains unprovable. Moreover, no sign system has ever been revealed among Saharan rock images, when tens of thousands of these are known, and when thousands of pages have already been dedicated—in vain, from this point of view—to the ‘signs’ found on such images.⁸⁷

Contrary to the theory of a proto-script to be sought among rock signs, there remains a last argument in view of which all others mentioned so far seem secondary. It is summarised as follows by Jean-Jacques Glassner, in a review on the origin of cuneiform script:

*Writing results from a conceptual work that cannot be dissociated from its application for fear of meaninglessness. The concept is cut out from the actual continuum of the forms to which it gives birth. Invention and first attestation are therefore necessarily situated in the order of simultaneity, the second only being the activation of the first. Based on this comment, there can be neither pre- nor proto-script.*⁸⁸

As such, the futile search for a Libyan matrix within rock images from the Sahara is similar to the approach of entomologist Kjell Bloch Sandved, who, for twenty-five years, looked for the letters of the Latin alphabet in the designs of butterfly wings.⁸⁹ While he did find them all in the end, it does not shed any light on the origin of this alphabet. For all that, any quest for the origin of the letters of the

87 Jean Leclant *et al.*, *La culture des chasseurs du Nil et du Sahara* (29), 2 vols (Algiers: Mémoires du CRAPE, 1980); Jean-Loïc Le Quellec, *Symbolisme et art rupestre au Sahara* (Paris: L'Harmattan, 1993).

88 Jean-Jacques Glassner, 'L'invention de l'écriture cunéiforme', *Pour la Science* 1930 (2002), pp. 19.

89 Kjell Bloch Sandved, *The butterfly alphabet* (New York: Scholastic, 1999).

Libyan alphabet is not necessarily hopeless. Looking for their antecedents must simply be done somewhere other than in rock iconography.⁹⁰

Selected bibliography

- Aghali-Zakara, Mohamed. 'De l'origine et de la survivance des écritures libyco-berbères', in Fantar, M'hamed Hassine & Ahmed Siraj (eds), *Débuts de l'écriture au Maghreb. Actes des colloques organisés à Casablanca par la Fondation du Roi Abdul-Aziz al Saoud pour les Études Islamiques et les Sciences Humaines, les 17–18 janvier et 18–19 avril 2002*. Casablanca: Publications de la Fondation du Roi Abdul-Aziz Al Saoud pour les études islamiques et les sciences humaines, 2005, pp. 85–90.
- Amara, Iddir. *L'art rupestre dans le sud-ouest de l'Atlas saharien (Algérie): étude analytique et typologique des figurations de la période récente*. Paris: Panthéon-Sorbonne, 2001.
- Amara, Iddir. 'Nouvelle approche de l'art rupestre de l'Atlas saharien: les figurations de la période tardive', *L'Anthropologie* 107 (2003), pp. 533–57.
- Anati, Emmanuel. *Les origines de l'art et la formation de l'esprit humain*. Paris: Albin Michel, 1989.
- Aumassip, Ginette. 'La période caballine, un renouveau de la vie saharienne' in *L'Algérie en héritage. Art et histoire. Exposition présentée à l'Institut du Monde Arabe du 7 octobre 2003 au 25 janvier 2004*. Arles: Actes Sud, 2003, pp. 53–59.
- Bates, Oric. *The eastern Libyans: an essay*. London: Macmillan, 1914.
- Bernus, Edmond. 'Marques de propriété touarègues et pierres tombales (plaines au sud-ouest de l'Aïr)', *Sahara* 8 (1996), pp. 7–17.
- Bouissac, Paul. 'Beyond style: steps towards a semiotic hypothesis, in Lorblanchet, Michel & Paul G. Bahn (eds), *Rock art studies: the post-stylistic era, or where do we go from here?* Oxford: Oxbow Books 1993, pp. 203–206.
- Burthe d'Annelet, Jules-Louis-Charles de. *À travers l'Afrique française. Du Sénégal au Cameroun par les confins Libyens (Mauritanie, Soudan français, Niger, Aïr, Kaouar, Djado, Tibesti, Borkou, Ennedi, Ouadai, Sila, Baguirimi, Tchad, Haut-Oubangui) et au Maroc par les confins Sahariens (Octobre 1932–Juin 1935)*. *Carnets de route (I et II)*. 2 vols. Paris: Firmin-Didot, 1939.
- Caillois, Roger. *Pierres réfléchies*. Paris: Gallimard, 1975.
- Camps, Gabriel. 'Aux origines de la Berbérie: Massinissa ou les débuts de l'Histoire', *Libyca, Archeologie-Epigraphie* 8 (numéro spécial) (1960).

90 For example, Werner Pichler & Jean-Loïc Le Quellec, 'Considerations on the sign ≈ and the problem of its interpretation in Tifinagh inscriptions', *Sahara* 20 (2009), pp. 7–14.

- Camps, Gabriel. *Aux origines de la Berbérie. Monuments et rites funéraires protohistoriques*. Paris: Arts et Métiers Graphiques, 1962.
- Camps, Gabriel. 'Recherches sur les plus anciennes inscriptions libyques de l'Afrique du Nord et du Sahara', *Bulletin archéologique du Comité des Travaux historiques et scientifiques* 10–11 (1974), pp. 143–66.
- Camps, Gabriel. 'Écriture libyque', *Encyclopédie berbère* 17 (1996), pp. 2564–73.
- Chabot, Jean-Baptiste. *Recueil des inscriptions libyques*. Paris: Imprimerie Nationale, 1940.
- Chaker, Salem. 'L'écriture libyco-berbère. État des lieux, déchiffrement et perspectives linguistiques et sociolinguistiques'. Colloque annuel de la SHESL, Lyon-ENS, 2 February 2002.
- Chaker, Salem & Slimane Hachi. 'À propos de l'origine et de l'âge de l'écriture libyco-berbère. Réflexions du linguiste et du préhistorien', in Chaker, Salem & Andrzej Zaborski (eds), *Mélanges offerts à Karl-G. Prasse*. Paris & Louvain: Peeters, 2000, pp. 94–111.
- Dayrell, Elphinstone. 'Further notes on 'Nsibidi signs with their meanings from the Ikom District, Southern Nigeria'', *The Journal of the Royal Anthropological Institute of Great Britain and Ireland* 41 (1911), pp. 521–40.
- Devulder, M. 'Peintures murales et pratiques magiques dans la tribu des Ouadhias', *Revue africaine* 426–427 (1951), pp. 63–102.
- Djekrif, Yasmina. 'L'épigraphie libyque', *Forum de l'Enseignant (ENS Constantine)* 3 (2007), pp. 20–35.
- Drouin, Jeannine. 'Formules brèves et formes graphiques en touareg' *Bulletin de Littérature orale arabo-berbère* 22–23 (1995), pp. 61–98.
- Drouin, Jeannine. 'Les écritures libyco-berbères', *Les Dossiers de l'Archéologie* 260 (2001), pp. 36–39.
- Février, James G. 'Écritures libyques et ibériques' in Février, James G. (ed.), *Histoire de l'écriture*. Paris: Payot, 1959, pp. 321–32.
- Fontanille, Jacques. 'Décoratif, iconicité et écriture. Geste, rythme et figurativité: à propos de la poterie berbère', *Histoire de l'art et sémiotique* 3(3) (1998).
- Foucauld, Charles de. *Dictionnaire abrégé Touareg-Français de noms propres (dialecte de l'Ahaggar)*. Ouvrage publié par André Basset, professeur à la faculté des lettres d'Alger. Paris: Larose éditeurs, 1940.
- Galand, Lionel. 'Petit lexique pour l'étude des inscriptions libyco-berbères', *Almogaren* 23 (1992), pp. 119–26.
- Galand, Lionel. 'Du berbère au libyque: une remontée difficile', *Lalies* 16 (1996), pp. 77–98.

- Galand, Lionel. 'Un vieux débat: l'origine de l'écriture libyco-berbère', *Lettre de l'AARS* 20 (2001), pp. 21–24.
- Galand, Lionel. 'La datation des inscriptions. Pour une évaluation des critères linguistiques', *La Lettre du RILB* 11 (2005), pp. 1–2.
- Galarza, Joaquín & Aurore Monod-Becquelin. *Doctrina Christiana, Le Pater Noster*. Paris: Société d'Ethnographie (Recherches Américaines 2), 1980.
- Gast, Marceau. 'Une pierre gravée singulière à Banon', *Actualité des Alpes de Lumière* 58 (1993).
- Glassner, Jean-Jacques. 'L'invention de l'écriture cunéiforme', *Pour la Science* 1930 (2002), pp. 18–23.
- Grasshof, Malika. *Signes et rituels magiques des femmes kabyles*. 1st edition. Aix-en-Provence: Édisud, 1999.
- Hachi, Slimane. 'Djanet, mirage miraculé', *L'année patrimoine* (2003), pp. 36–37.
- Hachid, Malika. *Les premiers Berbères: entre Méditerranée, Tassili et Nil*. Algiers/Aix-en-Provence: Ina-Yas/Edisud, 2000.
- Hachid, Malika. 'Du nouveau sur le monument d'Abalessa (Ahaggar, Algérie). De la date de l'introduction du dromadaire au Sahara central, du personnage d'Abalessa et des inscriptions rupestres dites 'libyco-berbères'', *Sahara* 17 (2006), pp. 95–120.
- Hayward, R.J. & Mohammed Hassa. 'The Shakh Bakri Sapalo syllabary and summary of the "Oromo orthography of Shaykh Bakri Sapalo"', *Bulletin of the School of Oriental and African Studies* 44(3) (1981), pp. 550–56.
- Herodotus, *The Histories*.
- Joffre, Joseph & Théodore Monod. 'A new West African alphabet: used by the Toma, French Guinea and Liberia', *Man* 43(85) (1943), pp. 108–12.
- Johnston, H.H. & L.W.G. Malcolm. 'Short notes on the syllabic writing of the EGâp — Central Cameroons', *Journal of the Royal African Society* 20(78) (1921), pp. 127–29.
- Koelle, Sigismund Wilhelm. *Outlines of a grammar of the Vei language, together with a Vei-English vocabulary and an account of the discovery of the nature of the Vei mode of syllabic writing*. London: Kegan Paul, Trench and Trübner, 1854.
- Kristeva, Julia. *Le langage, cet inconnu*. Paris: Seuil, 1974.
- Kroeber, Alfred L. 'Stimulus diffusion', *American Anthropologist* 42 (1940), pp. 1–20.
- Landais, E. 'Le marquage du bétail dans les systèmes pastoraux traditionnels', *Revue d'élevage et de médecine vétérinaire des pays tropicaux* 53(4) (2000), pp. 349–63.
- Le Quellec, Jean-Loïc. *Symbolisme et art rupestre au Sahara*. Paris: L'Harmattan, 1993.

- Le Quellec, Jean-Loïc. *Rock art in Africa. Mythology and legend*. Paris: Flammarion, 2004.
- Le Quellec, Jean-Loïc. 'À propos d'un site à gravures de la Tadrart algérienne: récurrences d'une association image-inscription', *Les Cahiers de l'AARS* 11 (2007), pp. 125–36.
- Le Quellec, Jean-Loïc. 'Du neuf avec de l'ancien: à propos des gravures et inscriptions du monument d'Abalessa', *Sahara* 19 (2008a), pp. 178–83.
- Le Quellec, Jean-Loïc. 'En suivant monsieur Akha (ou Agha) de la Tadrart au Messak', *Les Cahiers de l'AARS* 12 (2008b), pp. 161–69.
- Le Quellec, Jean-Loïc. 'From co-occurrence to association', *Rock Art Research* 25(1) (2008c), pp. 119–121.
- Le Quellec, Jean-Loïc. 'Rock Art Research in Southern Africa, 2000–2004', in Bahn, Paul G., Natalie Franklin & Matthias Strecker (eds), *News of the World III*. Oxford: OxbowBooks, 2008d, pp. 97–111.
- Leclant, Jean, Paul Huard & Léone Allard-Huard. *La culture des chasseurs du Nil et du Sahara* (29). 2 vols. Algiers: Mémoires du CRAPE, 1980.
- Lutz, Rüdiger & Gabriele. 'From Picture to Hieroglyphic Inscription. The trapping stone and its function in the Messak Settafet (Fezzan, Libya)', *Sahara* 5 (1992), pp. 71–78.
- Macgregor, J.K. 'Some notes on Nsibidi', *The Journal of the Royal Anthropological Institute of Great Britain and Ireland* 39 (1909), pp. 209–19.
- Milburn, Mark. 'Sur quelques inscriptions énigmatiques des confins Nigéro-Fezzanais', *Le Saharien* 91 (1984), pp. 22–25.
- Moreau, Jean-Baptiste. *Les grands symboles méditerranéens dans la poterie algérienne*. Algiers: SNED, 1976.
- Müller-Karpe, Andreas. 'Eine quadriga-darstellung in der zentral-Sahara (Nachtrag von Otto Röessler)', *Beiträge zur allgemeinen und vergleichenden Archäologie* 2 (1980), pp. 359–79.
- Muzzolini, Alfred. 'Le profane et le sacré dans l'art rupestre saharien', *Bulletin de la Société Française d'Égyptologie* 124 (1992), pp. 24–70.
- Muzzolini, Alfred. 'Au sujet de l'origine de l'écriture libyque', *Lettre de l'AARS* 19 (2001), pp. 23–26.
- Otte, Marcel. *Préhistoire des religions*. Paris: Masson, 1993.
- Ouzman, Sven. 'Koeka Kakie, hents op bokkor of ik schiet! Introducing the rock art of the South African Anglo-Boer War, 1899–1902', *The Digging Stick* 16 (1999), pp. 1–5.
- Ouzman, Sven & Benjamin Smith. 'Southern Africa's Khoekhoen herder rock art', *The Digging Stick* 21(3) (2004), pp. 1–4.
- Oyler, Dianne White. 'The N'Ko alphabet as a vehicle of indigenist historiography', *History in Africa* 24 (1997), pp. 239–56.

- Pasch, Helma. 'Competing scripts: the introduction of the Roman alphabet in Africa', *International Journal of the Sociology of Language* 191 (2008), pp. 65–109.
- Pichler, Werner. 'A propos "Association"', *Rock Art Research* 25(1) (2008), pp. 117–19.
- Pichler, Werner & Jean-Loïc Le Quellec. 'Considerations on the sign ≈ and the problem of its interpretation in Tifinagh inscriptions', *Sahara* 20 (2009), pp. 7–14.
- Pillet, C.P. 'Les marques de chameaux dans l'extrême sud Tunisien', *Revue tunisienne* 108 (1915), pp. 48–54.
- Poireau, Alfred. 'David Wabeladio. Inventeur de l'écriture négro-africaine: le Mandobe'. *Hexagone Magazine* (February–March 2004), pp. 16–18.
- Renaut, Luc. 'Les tatouages d'Ötzi et la petite chirurgie traditionnelle', *L'Anthropologie* 108 (2004), pp. 69–105.
- Rilly, Claude. *La langue du royaume de Méroé: un panorama de la plus ancienne culture écrite d'Afrique subsaharienne*. Paris: Honoré Champion 2007.
- Roumeguère-Eberhardt, Jacqueline. *Le signe du début du Zimbabwe. Facette d'une sociologie de la connaissance*. Paris: Publisud, 1982.
- Sahagún, Bernardino de. *Historia general de las cosas de Nueva España*. 4 vols. Mexico: Porrúa, 1969.
- Sandved, Kjell Bloch. *The butterfly alphabet*. New York: Scholastic, 1999.
- Schmitt, Alfred. *Die Bamum-Schrift. 1. Text, 2. Tabellen, 3. Urkunden*. 3 vols. Wiesbaden: Otto Harrassowitz, 1963.
- Soler Masferrer, Narcís, C. Serra, E. Joan & U. Jordi. *Sahara Occidental. Passat i present d'un poble. Sahara Occidental. Passado y presente de un pueblo*. Girona: Universitat de Girona, 1999.
- Tuchscherer, Konrad. 'African script and scripture: the history of the Kiakui (Mende) writing system for Bible translations', *African Languages and Cultures* 8(2) (1995), pp. 169–88.
- Tuchscherer, Konrad & P.E.H. Hair. 'Cherokee and West Africa: examining the origins of the Vai script', *History in Africa* 29 (2002), pp. 427–86.
- Vie-Wohrer, Anne-Marie. 'Découverte des écritures indigènes au XVI^e siècle dans le Mexique central', *Amerindia, revue d'ethnolinguistique amérindienne* 19-20 (1995), pp. 421–31.
- Zouari, Ali. *Les relations commerciales entre Sfax et le Levant aux XVIII^e et XIX^e siècles*. Tunis: Institut national d'Archéologie et d'Art, 1990.