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THE ALPHABETS OF THE BERBERS.[1]

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THE Berber tribes are called by some writers collectively Hamites, and by others Proto-Semites. From the dawn of history they have occupied most of the area between the Nile Valley and the Atlantic Ocean north of the Soudan. They have, also, linguistic kinsfolk in Abyssinia and in adjacent parts of East Africa. The ancient Ethiopians were of their lineage; Timbuctoo was founded by one of their chieftains, and the extinct Guanches of the Canary Islands were members of their stock. To them belonged the classical Libyans, Numidians, Mauritanians, and Getulians, and in later times petty tribes innumerable, the most prominent of which to-day are the Rifians of Morocco, the Kabyles of Algeria, the Touaregs or Tamachek of the Sahara, the Mzabis, etc.

During two short visits to North Africa in the years 1888 and 1889, I became much interested in the ethnology of this stock, which offers many most interesting problems. The one to which I shall confine myself at present is its methods of writing.

The Berber hordes of to-day, with one exception, employ the Arabic alphabet, though it fails to render some of the sounds with precision. The exception is that of the Touaregs of the Sahara. They employ an alphabet of their own, of great antiquity and disputed origin. They call it *tifinar*, which is a plural from the singular *tafinek*. As in the Berber dialects, the radicals are single or small groups of consonants, invariable, and inflected by vowel changes, we have in *tafinek* the quadriliteral radical *t-f-n-k*, as is held by Rinn; or, if the initial *t* be regarded as a neuter prefix, there will be the triliteral root *f-n k*. The primitive meaning of this root is a sign, mark, or token by which a place or thing is recognized. Peculiarly-shaped stones or ridges, which serve as landmarks, are called *efinagha* (Barth).

Strictly speaking, the word *tifinar* applies only to those letters of the alphabet which can be represented by straight lines; while a number of others, expressed by dots, receive the name *tiddebakin* (Rinn). All letters, whether simple or compound, can be and usually are written by one or other of these methods, straight lines or dots, as is shown by the alphabet presented, from Hanoteau's Grammaire Tamachek. The cursive script, however, permits the use of curved variants in some cases, all of which are shown on the alphabet I submit.

The Touareg alphabet is far from systematic. The order in which the letters are arranged is purely arbitrary; there is considerable difference in the forms of letters in different tribes; there are no vowel-points like those in modern Hebrew, and no accessory signs to represent pure vowels. What is worse, there is no rule as to whether the script should be read from left to right or from right to left, from above downward or from below upward. The assertions made to the contrary by Hanoteau and Halévy are disproved by the documents published by Rinn, which I show. They were written by native Touaregs to native Touaregs The writer sometimes begins at a corner of the page, and proceeds from right to left or from left to right as he pleases; arrived at the further margin, he turns his sheet, so as to go perpendicularly or in any other way that suits him. As the words are frequently not separated, as punctuation and capital letters are unknown, and as the sequence of the lines is not fixed, it is no easy matter to decipher a Touareg manuscript. When a native undertakes the task, he begins by spelling the consonants aloud, in a chanting voice, applying to them successively the various vowels, until he finds the words which make sense (Hanoteau).

Imperfect as this alphabet seems, it is in very extensive use among the Touaregs, both men and women. Barth found that his young camel-driver could read it with ease. Captain Bissuel writes: "A de trés rares exceptions, prés tous les Touaregs de l'ouest, hommes et femmes, savent lire et ecrire." Duveyrier makes a similar statement of the Touaregs of the north.

Most writers, one following the other, have traced the Touareg alphabet back to the Carthaginians, and have sought to identify its letters with those of the Punic writing.

Its history, however, is by no means so easy to unravel. That certain of its letters are identical with the Semitic alphabets is unquestioned; but some of them are not; and those that are alike, may they not be mere loans, or even independent derivatives, from some one common source?

The material to solve these problems must be drawn from ancient inscriptions. These are by no means lacking, and prove that an old Berber alphabet was in use in Northern Africa long before the Christian era; yes, in the opinion of some archæologists, as Collignon and Rinn, long before the founding of Carthage.

These inscriptions are of two classes, the one carved on dressed stones, such as grave and memorial tablets; the other on native rocks, *in situ*, where a smooth surface offered a favorable exposure.

A large number of the former were copied and published by General Faidherbe and have been studied by Professor Halévy. The latter explains most of the letters by the Punic alphabet, and presents transliterations and renderings of the epitaphs. His identifications, however, have not satisfied later students. I find, for instance, that while Halévy's "Essai d'Epigraphie Libyque" was published in 1875, Réné Basset, probably the most thorough Berber scholar living, writes in 1887 in his "Grammaire Kabyle": "Le déchiffrement de ces inscriptions est encore aujourd'hui sujet à contestation, au moins pour le valeur de plusieurs lettres."

This difficulty very much increases when we come to the other class of inscriptions — those engraved on the living rocks. The mortuary epitaphs collected by Faidherbe may be referred with probability to a period two or three centuries before Christ; but the rupestrian writing is of much more uncertain age. Some of it has the patine and other attributes of high antiquity; in other instances it is evidently recent. Examples of it are found in abundance on both slopes of the Atlas range from Morocco to the Libyan Plateau. Unquestionable instances have been reported from the Canary Islands by Dr. Verneau; Barth found them south of Fezzan; Captain Bernard copied some in southern Algiers; last year M. Flamand described a number of stations in southern Oran; Dr. Hamy has made an instructive study of them; and a number of other travellers have added to our knowledge about them. They are often carefully and cleanly cut into the faces of hard rocks, and are thus calculated to resist the elements for many generations.

What is noteworthy about the oldest types of these rock-writings is this: that while they contain some letters which are common to the Touareg, Libyan, and Punic alphabets, they also present a certain number which are not, and which cannot be explained by them. Thus, in the most recent article on the subject, published last year in *L'Anthropologie*, M. Flamand writes that these glyphs show "bien characterisées, des lettres Libyco-Berberes, et aussi des signes qu'il a été jusqu'ici impossible de comparer avec aucun de ces alphabets." The copies of

[1] Read at a meeting of the Oriental Club of Philadelphia, Feb. 9. (See *Science*, Nov. 18, 1892, p. 290.)