

# A CONSISTENT NOMENCLATURE FOR THE ROCK ART SITES OF THE SAHARA AND AFRICA

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**Résumé:** Cartes imprécises et/ou incomplètes, toponymes absents ou variables d'un document à l'autre rendent difficile sinon ambiguë toute discussion scientifique sur le Messak (Fezzán). La nécessité de décrire avec précision la localisation des stations rupestres nous pousse à proposer une nomenclature totalement indépendantes de la toponymie. Cette nomenclature, valable en fait pour tout le continent africain, repose sur un découpage en pavés réguliers basé sur les coordonnées géographiques, latitude et longitude. La convention proposée autorise des extensions en cas de nouvelles découvertes.

Riassunto: Le poche mappe riguardanti la zona del Messak (Fezzan, Libia) sono generalmente vaghe e incomplete. Inoltre i nomi dei luoghi risultano spesso mancanti o addirittura diversi da un documento all'altro, cosicché qualsiasi discussione scientifica su quest'area è particolarmente difficoltosa e ambigua. La necessità di descrivere e di collocare con precisione i stit di arte rupestre ci ha convinti a proporre una terminologia che sia totalmente indipendente dalla toponimia. Valida per l'intero continente africano, la nostra terminologia si basa su una divisione del territorio mediante una quadrettatura regolare, usando le coordinate standard di longitudine e latitudine. Questa convenzione è passibile di estensioni nel caso si verifichino scoperte di nuovi siti di arte rupestre.

#### Motivation

First and foremost when studying Rock Art sites, the researcher must be able to describe the local topography and, hopefully, localize the site relative to others. The question of site name or other designation can lead the researcher into a morass of conflicting information. This is a general problem for the Sahara and a crucial one for our work in the Messak (Libya), which has been impeded by the paucity of accurate "site name" designations or toponyms. Available maps are approximate at best. Different maps will place a wâdi here or there, seemingly anywhere. Discrepancies of 5 km are not uncommon. Overlaying a map of a local region on top of a satellite constructed map can lead to extreme confusion as to the name of any particular place.

One finds that in most instances our present toponymic information stems from the era when nomads wandered extensively in this region of North Africa. Place names were collected by the military, explorers and early researchers from local, regular passersby, whose experience of the desert was current and for their practical purposes precise. Today since the nomadic way of life has been sharply curtailed, these contacts are rare. Consequently, learning names or other designations for any place in these remote desert regions has become more difficult. This problem is further complicated by loss of place names, or, generalizations of the name of a portion of a valley to refer eventually to an entire region. This is the case for Berjûj. Place names vary according to local dialect and, as well, to the linguistic background of the researcher. The site Berjûj, for example, has been transcribed as: Berdjudsch, Berdjudi, Barjoo, Barju,j, Bergiug. The inevitable conclusion: no map can be considered at present to be definitive.

A few further examples can help illustrate the general problem. Are the Geddis and Beddis widyân, mentioned on different maps, names for different valleys or merely different names for the same site? In the Northern Messak Mellet (the «White Plateau», because it is «sandy»,) the Imrâwen wâdi was identified by one of us (JLLQ) through Tuareg nomads of Bâb erMaknûsa who travelled there. However, on an American map the Imreuen wâdi is placed tens of kilometers further South. What should one think'? In the Messak Settafet' (the «Black Plateau», because of its predominant colour) there is some confusion between the Italian designation of the I-n-Eiedh wâdi and the I-n-Ahaed wâdi shown in other sources. The site designated erWarer is often incorrectly transcribed as EI-Aurer, suggesting an erroneous pronunciation. In general, the extent of the Messak Settafet and Messak Mellet are well known and bounded on one side by the Aramas wâdi which the Americans, as implied above, once again place further South and the region called 'Mestafet' on other maps is clearly an abbreviation - Mes(sak Set)tafet, etc.

Is there a solution to this predicament which can be achieved in a reasonable time-frame? The direct method of organizing a research team which will methodically catalogue each and every wâdi and hillock using an agreed upon convention for names and with satellite verified coordinates is impractical. Many years of effort and an unreasonable amount of money would be required. With this in mind, the unedited work begun in the 40's by G. Lelubre presents a viable starting point and alternative.<sup>2</sup> During his time in the Messak Settafet, he travelled with an *«old Kel Messak. who had an admirable knowledge of the countryside»* from Ubâri to the Aghelad pass. Together they identified most of the widyân and adrars on their journey using a Peigné compass, a watch and length of a camel's step. The method was primitive yet re-

 $<sup>^{\</sup>rm I}$  A table which com<sub>p</sub>ares the transcriptions into English, French, German and Italian to the transliterations of site names from the original Fezzani and to the Arabic characters provided by Le Quellec 1986: 362-363. This work suggests that researchers should be encouraged to adopt a transliteration system for the price of a little effort the transliteration system: for the price of a little effort the publications would gain clarity.

<sup>&</sup>lt;sup>2</sup> Thanks to Mr Lelubre who kindly placed his unedited documentation at our disposal.

<sup>&</sup>lt;sup>3</sup> Lelubre, in lett., 24-IX-1992.

markably accurate. Nevertheless, there remains much work which still needs to be done in the South of the Settafet and for the entire region of the Mellet.

Even assuming that the name survey might be completed, there would always exist the chance for a few remaining nameless topographic features. How shall we proceed'? Should we use arbitrary names unrelated to the local history? Indeed we should avoid names such as «Tadrek n'Elizabeth» or incongruous designations such as «la Baleine (Whale)» or «le Sous -Marin (Submarine)». Consider the «wâdi Haleeb»,4 which we could never succeed in finding either on a map or through the help of a local guide... and for a good reason: this incidental name was given to the site in the Messak where was discovered a famous milking scene, and without doubt, this «Haleeb» refers to milk (halîb in Arabic). It seems a shame to us that such names should become established by common usage since one rapidly forgets that those names have been given recently. Under such circumstances, more attractive would be instead an ancient traditionnal place name: it would have meant that Tuaregs had paid attention to the remnants of Rock Art and included them in their oral traditions. Certainly it should be hoped that the names introduced into the literature should be properly accredited and correctly transcribed.

Finally, is there a need to remember that, for those who understand them, the indigenous names of place are anywhere as precious reminders of the local environment and culture? If the terms such as Bir (pl. Abyar) «well» or Guelta (pl. Glat) «place of water» or Garat (pl. Gur) «mesa» are gone from common usage, others are merely less well understood: Ramlat «sand» or Tadrat, feminine for Adrat, «chain of mountains». Still others are often ignored, for example, Iheren which is the plural of Ahir «source of dripping», Anu (pl. Unan) «permanently closed well» or Abankor (pl. Ibenkar) «temporarily drained well», incorrectly transcribed by Frobenius as «Ibanka». In the region southwest of the Fezzan, one can also cite the example of the Bab erMaknûsa gap where it is helpful to know the name «Passage swept (by the wind)», while the famous «Adrar Ekteben» (or «Iktebīn») - correctly translated by Frison-Roche as «Mountain of Writings» will provide, for example, a place of interest for a researcher of Rock Art.

Having understood the above arguments, it should be recognised that we need determine way to precisely localize the sites under discussion. It is important that we formulate a nomenclature which is simple, unambiguous and which we will all agree to use.

### Our charge

From the previous discussion, we have learned:

First, the importance of creating a nomenclature that is totally independent of local place names which are only occasionally helpful and/or accurate.

 $<sup>^4</sup>$  Berthoud, 1977-78, did not name this site. The name comes from an independent publication by Jacquet 1978.

<sup>&</sup>lt;sup>5</sup> Frobenius 1937: 14. Concerning geographic and hydrologic terms in arabic and berber in the Sahara, see Capot-Rey et al. 1963.

Second, it should be a universal system adaptable to the whole of Africa not merely the Sahara. Third, it should be an open system which permits additions without creating any confusion. Inevitably, there will be uncatalogued sites. A nomenclature which allows, for example, a wadi name and an ordering number (some combination of a geographical criterion and a chronological one) risks problems if other sites are discovered among those that are already known. Finally, this nomenclature should be precise and use a limited number of symbols to definitively determine the location. It should also be easy to read.

# **Proposal**

The only simple system, that requires no discussion and is already universally used in other fields, is the one used for navigation: co-ordinates according to longitude and latitude. What remains is to adapt this system to our needs.

Africa is bounded by longitude 17° West and 52° East and the latitudes 38° North and 34° South. Designating a place with a complete co-ordinate set, e.g. 32°16N/12°45E, requires an unacceptably large number of characters,13! We suggest dividing Africa into 2° squares of longitude and latitude, using O° longitude at the equator as the origin of our coordinate system.

The 26 letters of the alphabet would then provide 52° on either side of the Greenwich Meridian- This is sufficient to reach the Horn of Africa (app. 51°E) and Mauritania (17°W). In general the alphabet is sufficient to detine all African latitudes. To achieve an appropriately fine grid we propose that each 2°x2° square be subdivided into 10' squares. For the larger squares we will use capital letters and for the finer grid we will use small letters.

Having thus divided Africa into small sections, we need an unambiguous method to distinguish the four points of the compass referring to our origin at the Greenwich-equator intersection. Rather than use a minus sign «-», we propose that the letters for West and South should be underlined. This conventinn can easily be outlined by the following:

A corresponds to  $0^{\circ}$  to  $2^{\circ}$  East B corresponds to  $2^{\circ}$  to  $4^{\circ}$  East

Z corresponds to  $50^{\circ}$  to  $52^{\circ}$  East

 $\underline{A}$  corresponds to  $0^{\circ}$  to  $2^{\circ}$  West  $\underline{B}$  corresponds to  $2^{\circ}$  to  $4^{\circ}$  West

a corresponds to the grid 0' -10' in the larger grid

b corresponds to the grid  $10^{\circ}$  -  $20^{\circ}$  in the larger grid

f corresponds to the grid  $50^{\circ}$  -  $l^{\circ}$  in the larger grid

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g corresponds to the grid 1^{\circ} - 1^{\circ\circ} 10' in the larger grid ... 1 corresponds to the grid 1^{\circ} 50' - 2^{\circ} in the larger grid ...
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For instance: the site EI-Warer ( alias el Aurer ) found at  $25^{\circ}\,42'\,74''\,N/12^{\circ}\,05'\,53''\,E$  translates to MkFa.

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The site 16^{\circ} 16S/13^{\circ}45E is IbGk. The site 16^{\circ} 16S/13^{\circ}45W is IbGk. The site 16^{\circ} 16N/ 13^{\circ}45W is IbGk.
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One can easily see that the 13 characters used by our navigational system have been reduced to 4.

At the Equator one minute of arc is equivalent to 1852 m, therefore our finest grid refers to a square which is approximately 18 kilometers on each edge. In some areas, where there are parallel widyân which are very close to each other (e.g. the Messak, not to mention the difficulty caused by innumerable intersections), this grid is too loose to account for the many sites which are often less than 300m apart. Here, one can make use of a chronological ordering, for example, IbGk-2 for the second site found in block IbGk.

There is nothing particularly original about this nomenclature. Such a system is used in Canada,<sup>6</sup> but it depends, in that case, on the grid defined for their national map.

It would also be possible to rely on the grids defined by the IGN (Institut Géographique National) for maps with scales  $1/100\ 000$  and  $1/200\ 000$  except that then one would need more characters for the larger squares (e.g.: NG32 for Djanet). The edges of a block ( $4^{\circ}$  x  $6^{\circ}$ ) would make using the alphabet difficult if not impossible, since for the same resolution achieved above, one would require 36 characters for longitude.

## A fine grid

At the expense of adding a few characters (6 instead of 4 in contrast to the full 13) it is possible to consider a grid of  $1.8 \times 1.8 \text{ km}$  by retaining the ciphers for the minutes. This requires that we have a convention to distinguish the degrees (since each letter represents  $2^{\circ}$ ). This can easily be accomplished by using capital and small letters, where small letters refer to even degrees and capitals to odd numbered degrees. More concretely:

for the site at  $16^{\circ}16N/13^{\circ}45 E-1$ : i 16G45-1 (1st site of grid) for the site at  $17^{\circ}16N/13^{\circ}45E-3$ : 116G45-3 (3rd site of grid) for the site at  $17^{\circ}16N/12^{\circ}45E-2$ : 11645-2 (2nd site of grid)

<sup>&</sup>lt;sup>6</sup> Wainwright 1985.

Thus the code is more easily readable and the final grid has better resolution.

It is this last system which we propose for use.

### Remarks

With regards to the last code, one should strive to respect the geographical position wherever possible. If for very short distances, the chronological order takes precedence (some sites being discovered later), this should pose little inconvenience. This system is sufficiently open ended and free from the constraints and hazards of toponymic research.

Besides, nothing stands in the way of adding a toponym to this nomenclature. For instance, when one describes an entire wâdi, this would permit reduction of the text and guarantees its homogeneity. In any case, with or without reference to a toponym, the sites are perfectly situated.

The grid, thus defined, seems to us to be fine enough for most cases. Certainly, we have seen that many sites can co-exist in the same small grid, but to be more precise we would have to add more characters to consider a 10" grid, for example. At which point one reaches the limits of the navigational system. Speaking of which, one should remember that Rock Art sites are often as much as IOOm long and that the co-ordinates are often only determined 'near' the art-decorated cliffs (note that the navigation system is generally attached to one's vehicle). Hence, a resolution as fine as 1" of arc would be difficult to use in many instances.

The authors who intend to use this system in their own work ( see Gauthier- Le Quellec, 1994) wish to submit this proposal to the community at large and look forward to suggestions from the community for improvements to its precision ( if possible a reduction in the number of characters) and/or improved readability ( permitting easier translation to physical co-ordinates ).

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