

SELEFA

Société d'Études Lexicographiques & Étymologiques Françaises & Arabes

Star Lore in the Arab World

A Research Project

**presented by
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A. Background considerations

Star Lore in the Arab World is part of a larger project entitled *The Sky, our Common Heritage* which aims to highlight the different strata in our present-day representation of the sky featuring the 88 constellations retained by the IAU (International Astronomical Union).

1. Reasons for highlighting Arab representations of the sky

11. Interest everywhere in the celestial imaginary and its representations

* We observe today, in our field of study, i.e. that of celestial representations, that there is considerable interest in the history of astronomy, both in its mathematical and physical aspect and in its cultural dimension, which is to say representations of the sky and of the celestial imaginary.

* Responding to this interest is an effort on the part of many people around the world to make these treasures of the human spirit more generally available.

* In the case of the Chinese their own representations of the sky, so far barely known in the rest of the world, are popularised through Chinese, Japanese and Korean universities, museums and astronomical centres keen to present, as well as the common international figures in current use, their own traditional figures and rich celestial imaginary.

* There is enormous interest in ethnoastronomy, both among university researchers and more generally, among amateur astronomers in particular. But whereas the greater part of the Arab contribution to the international heritage is explained by popular Arab traditions, the representations that receive most attention are those of the Amerindians and Africans.

12. A paradox: the Arab contribution to the international heritage is huge but largely unknown

Two thirds of the common names for stars in star catalogues the world over are Arabic in origin, though typically their users, including those in the Arab world, know nothing at all about the imaginary world that lies behind them.

This glaring imbalance needs to be corrected as a matter of urgency. The task is made somewhat easier today by the globalisation of the means of communication and by the internet since all peoples now have the technical means to disseminate knowledge of their culture and share it with others.

2. Aims and objectives

The objective will therefore be to assemble elements of this imaginary world, as follows:

1.1 In the short term: a website with a database will be created. This will be the main channel of communication for the project. Research findings will be posted as they become available, and space will be given to methodological reflections on the work being undertaken.

1.2. In the long term: the results of the work will be assembled and evaluated in a book to be called ‘Star Lore in the Arab World’.

B. Directions of research

The starting point for the work will of course be classical literature. But of equal importance to the project are the treasures of popular literature and oral memory – notably that of sailors, farmers or Bedouins whose practical knowledge of the stars is fast disappearing. Popular literature and oral memory are not only precious tools for explaining a certain number of celestial figures. They can also be used as a reference point for presenting these figures to an Arab public, while helping to safeguard the cultural heritage of the Arab peoples and of humanity.

1. Classical Arab Literature

The work of reconstructing the Arab sky from classical literature will be based on the following sources: classical dictionaries, literary texts (poetry, fiction, etc.) and classical astronomical literature.

As the work can be done in different countries and different institutions, tasks will be shared out among the participating teams according to the following criteria: availability of literary documentation and local access to sources (general libraries, research centres, observatories, and so on); considerations of space-time: the pre-Islamic period, the Umayyad and Abbasid periods, etc.; Egyptian space, that of the Maghreb etc.

The work will involve assembling legends, literary images (metaphors, allusions, etc.) and proverbs for the different celestial figures classified according to their position in the sky.

2. Dialectal literature and oral memory

This work of reconstructing the Arab sky from dialectical literature and oral memory is partly ethnographical and partly anthropological (see Appendix 1: ‘On ethno-astronomy’). Local in character and geographically determined, it will involve:

- * assembling material provided by orientalists or European travellers to the Maghreb as well as the Mashreq;
- * local almanachs (*kutûb al-anwâ’*)
- * collecting data from the populations concerned: sailors, Bedouins, and farmers, but also town dwellers, for the stars and star lore must also be referred to in urban traditions, in songs.

Participants in each country will work independently but the network will ensure that any information of general interest is circulated, so that groups can situate their research findings in relation to what other groups are discovering, and also so that each group can share its experiences.

C. Preliminary work and getting the project under way

Getting the project under way depends on two things:

- * a formal agreement between the different partner institutions, one that anticipates an adequate legal framework;
- * the necessary funding to see the project through.

We are therefore at the preliminary stage, and the tasks are as follows:

1. Establishing the different research teams

These teams will be established in different countries by group leaders who will bring together researchers (teachers and students) in different areas: linguists, literary critics, ethnologists, astronomers, historians, and so on, according to the requirements of the work and local possibilities. Each team undertakes:

- * to indicate the type of work it can do and to develop practical research proposals;
- * to influence the shape of the project and to make a positive contribution to the project agreement;
- * to provide an estimate of its expenditure budget which will enable a provisional budget for the project as a whole to be established. This estimate will be itemised as follows: Remuneration of researchers; Documentation costs (purchase of books, subscriptions, etc.);

Field work costs; Administration costs (secretariat, communication, etc.); Equipment costs: computers, software, etc.;

* to seek sources of financial support in its own country.

Until the project gets under way generally, teams that are able to begin assembling material within their institutions and with their own funding, are encouraged to make a start.

2. Establishment of a Steering Committee

The Steering Committee is made up of the leaders of the different teams wishing to join the network. It is presided over by Roland Laffitte and coordinates activities in the preliminary stage of the project.

It acts as a scientific committee, arbitrates between the different teams, and validates research proposals;

It seeks new partners for the network, especially in the Arab world;

It seeks funding from international institutions and cultural foundations. It does this in collaboration with SELEFA which:

* has already met the initial costs out of an allocation given by ACSE (Agence nationale pour la Cohésion Sociale et l'Egalité des Chances, a French public body), to the project 'The Sky, our Common Heritage';

* undertakes to seek funding from European institutions.

It is the Steering Committee's job to establish a provisional budget for running and administering the project, under the following headings: Remuneration of the Director and administrative staff; Equipment costs (computers, software, etc.); Head office costs; Administrative costs (secretariat, communication, etc.). It must also establish a provisional budget for the project as a whole.

It assesses progress on a regular basis, both in terms of contacts made and tasks achieved in the preliminary phase.

APPENDIX I: On ethnoastronomy

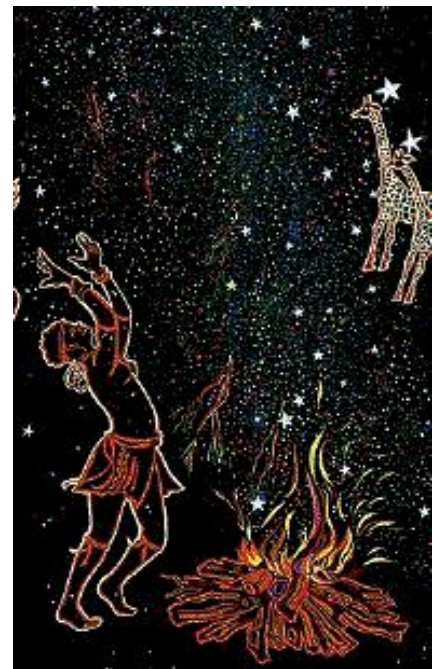
Ethno-astronomy studies the celestial representations of different peoples from an ethnographic and anthropological viewpoint: it relates representations of the stars to the practical needs of society (the days, months and seasons, orientation in time and space) as well as its culture (star lore, symbolism of the stars, relation of the stars to the divine, etc.)

There is currently immense interest worldwide in this discipline, in universities and research institutes as well as more generally. The representations that are most commonly studied are those of the Amerindians and the Africans, though very few star names actually come from these sources.

I. Maps of the sky



Celestial map of the Lakota Indians. A cross leaning against the *Milky Way* links *Sirius* to the *Pléiades* via the stars of *Orion*. On the other side of the *Milky Way* can be seen *Procyon* and the stars of *Gemini*.



The same celestial space as seen by the Khoikoi (Botswana, Namibia and The Cape), diagram by South African researchers.

II. The seven stars of the North as represented by the Indians of North America

A beautiful metaphorical representation of the seasons is supplied, for example, by the Mesquakie Indians who lived in New Brunswick and Nova Scotia in Canada:

These people imagined the figure of a *Bear pursued by hunters*. In May the quadrilateral of the *Great Chariot*, i.e. $\alpha\beta\gamma\delta$ *UMa*, which in this representation creates the figure of the *Bear*,

seems to be climbing up the Eastern sky. This is the Bear coming out of his cave. In midsummer the figure of the Bear pursued by the seven hunters, indicated by the three stars that form the shaft of the *Chariot*, $\epsilon\zeta\eta$ *UMa*, and the $\lambda\gamma\rho\alpha$ *Boo* series which comes next, represents the hunt. In the autumn the Bear appears in the west, on his hind legs and in a defensive position opposite the hunters who take advantage of his weakened state as he prepares to hibernate and kill him. His blood turns the leaves of the trees red. In the winter the Bear can be seen lying on his back. Then he gets up again in the east and the cycle resumes.

Source: MONROE, Jean Guard & WILLIAMSON, Ray A., *They dance in the Sky. Native American Star Myths*, Boston: Houghton Mifflin Co., 1987.

III. Ethnoastronomy in the Arab world

Most of the work done in the Arab world to date has been on the tradition of the *anwā'*. We have, in particular, the publications of Charles Pellat and those of Daniel M. Varisco on classical Arab literature:

- * PELLAT, Charles, 'Dictons rimés, *anwā'* et mansions lunaires chez les Arabes", *Arabica*, vol. II, 1955, pp. 17-41.
- * VARISCO, Daniel Martin, 'The *Anwā'* Stars according to Abû Ishâq al-Zajjâj', *Zeitschrift für Geschichte der arabisch-islamischen Wissenschaften*, vol. V, 1989, pp. 145-166.
- * VARISCO, Daniel Martin, 'The Origin of the *anwā'* in Arab Tradition', *Studia Islamica*, n° 74, 1991, pp. 5-28.

The latter has also done ethnographical collection work in the Arabian Peninsula and especially the Yemen, for example:

- * VARISCO, Daniel Martin, 'The Rain Periods in Pre-Islamic Arabic', *Arabica*, vol. 34, pp.251-266.
- * VARISCO, Daniel Martin, 'The agricultural marker stars in Yemeni folklore', *Asian Folklore Studies*, vol. 52, pp.119-142.

One may also note:

- * BAILEY, Clinton, 'Bedouin Star-Lore in Sinai and the Neguev', *Bulletin of the School of Oriental and African Studies*, vol. XXXVII, Part 3, 1974, pp. 580-597.
- * BERNUS, Edmond & AG-SIDIYENE, Eliya, 'Étoiles et constellations chez les nomades', *Awal*, V, 1989, 141-153.
- * HOLBROOK, Jarita, 'Stellar Navigation of the Kerkennah Islands, Tunisia', *Archaeoastronomy & Ethnoastronomy News*, n° 29, 1998.
- * MONTEIL, Vincent, 'Notes sur la toponymie, l'astronomie et l'orientation chez les Maures', *Hesperis*, vol. 36, 1949, pp. 180-219.

APPENDIX II: Progress report

The institutions which have responded favourably to this initiative so far are the following:

1. In Egypt, the PSC (Planetarium Science Center) of the Bibliotheca Alexandrina, by letter from its director Ms Hoda El Mikati; and a group of researchers under the direction of Professor Salah Fadl;

2. In Tunisia, The University of Sfax, by letter from its president M. Hamed Ben Dhia, and the research unit ERCILIS (Equipe de Recherche en Civilisation et Littérature de Sfax) led by Ms Hédia Abdelkéfi.

3. In France, the Côte d'Azur Observatory, on the word Mr Jean-Louis Heudier, Director of the Observatorium.

Letters of support for the project as a whole have been received from:

1. Mr Habib al-Malki, Minister of Higher Education and Scientific Research, Kingdom of Morocco;

2. Mr Abdelaziz Belkhadem, Prime Minister, People's Democratic Republic of Algeria.

Also:

Ms Nicole Revel, Research Director at the CNRS, has agreed to become a member of the Steering Committee and to advise on ethnoastronomy. Her work in this area has included research on the Palawan Island in the Philippines, published in *Fleurs de paroles – Histoire naturelle Palawan* (Paris: Peeters/Selaf, Ethnoscience collection, 1990-1992, 'La catégorisation du temps', vol. III, pp. 165-284).

APPENDIX III: SELEFA, coordinating institution

1. Presentation of SELEFA

SELEFA (the Société d'Études Lexicographiques et Étymologiques Françaises et Arabes) is a law-of-1901 association created in March 2002 and based in Pantin, Paris..

It has the following aims:

1. To promote research into lexicographical exchanges between languages, written and spoken, ancient and modern, on both sides of the Mediterranean.
2. To study a shared cultural heritage that includes linguistic borrowings, demonstrating how the great civilisations of the Mediterranean are not external to one another and how the different cultural heritages are part of a larger whole.

The educational challenge:

Words, and especially names, are a tool for raising awareness of what we have in common. The pleasure, the thrill even, that names can provide is a good springboard for learning. They are the result of a complex history, they are often linked to the supernatural, and they arouse curiosity. Playing with words is a simple way of breaking down the barriers that prejudice erects between different periods of history and different cultures. Juggling with words allows us to highlight in a playful way the contribution of different civilisations and every social group to our common culture, to quietly enrich each member of each society with the contributions of the others, to straightforwardly convey in a practical way the idea of what is pooled and what is shared in the life of the City-world.

Activities :

* Working with a network of the best scholars in the field, SELEFA holds regular meetings and publishes the results of its research in linguistics in a twice-yearly Bulletin.

* Having considerable experience in the cultural and educational fields, SELEFA works to promote the sharing of a common heritage among adults (in further and continuing education, in cultural centres and in the context of various university or cultural events), as well as among children and young people (in lycées, collèges, community centres, etc.). It offers lectures as well as practical sessions of various kinds.



The Farnese Atlas, a Roman copy of a Greek globe, 1st c. AD

For more details go to : www.selefa.asso.fr

2. Roland Laffitte, project leader

Roland Laffitte is the author of works on linguistics, secretary of SELEFA and editor of its Bulletin. He has specialised in (i) Arabic and oriental words in European languages and (ii) ancient astronomy and the names of celestial bodies in Babylonian, Greek, Aramaic and Arabic.

He is in charge of the project 'The Sky, Our Common Heritage'.

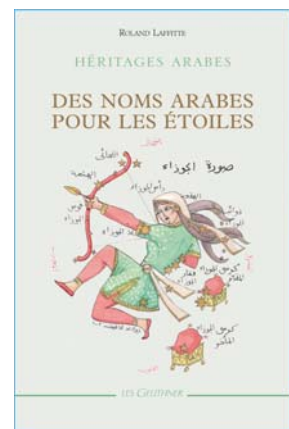
Works on Ancient Astronomy

Publications

Books:

* *Des noms arabes pour les étoiles*, Paris: Geuthner, 2001, revised edition, 2005.

* Contribution to: *Les Instruments mathématiques, XVI^e -XVII^e siècle : cadrans solaires, astrolabes, globes, nécessaires de mathématiques, microscopes, etc.*, Camille Frémontier-Murphy, Paris: Musée du Louvre, Département des objets d'art, 2002: decipherment of the names of stars on the retes of astrolabes in the Louvre as well as tables of latitude and longitude on their tympanums. See '*Les astrolabes du Louvre*' at www.selefa.asso.fr.



Books due for publication and in preparation:

* *Les Noms d'étoiles. Origine et signification de 500 noms*, Paris : Geuthner, 2008.

* *Étoiles & constellations de Babylone à nos jours. Origine de nos figures célestes & Étymologie des noms d'étoiles*, Paris : Geuthner, 2008.

* *Naissance et diffusion des constellations et du zodiaque mésopotamien*, Paris : Geuthner, 2009.

Articles:

* 'De l'akkadien Zibânîtu à l'arabe Al-Zubânâ, en passant par le mandéen zibânîta?', *Semitica* (Cahiers de l'Institut d'Études Sémitiques du Collège de France, Paris), n° 50, 2002.

* 'Les Noms sémitiques des signes du zodiaque, de Babylone à Baghdad', *Comptes Rendus du GLECS* (Groupe Linguistique d'Études Chamito-Sémitiques, Paris), vol. XXXIV, 2003.

* 'Sur le zodiaque sudarabique', *Arabia* (a review of sabeology published by IREMAM, Aix-en-Provence & ISIAO, Rome), n° 1, 2004.

* 'Sur l'origine du nom de la constellation de la Vierge', *Journal asiatique*, Paris, vol. CCIXII, n° 1 & 2, 2004.

* 'D'où viennent nos constellations et nos noms d'étoiles', *Planétariums*, review of the Association des Planétariums de langue française, May 2006.

* 'Ce que notre ciel doit aux Arabes', *Les Cahiers Clairaut*, Bulletin du comité de liaison enseignants et astronomes, n° 109, Summer 2006.

* « Précisions sur le noms des signes du zodiaque », *Bulletin de la SELEFA*, n° 7, June 2006.

Scientific presentations

- * ‘Les noms sémitiques des signes du zodiaque, de Babylone à Baghdad’, presentation given at the Groupe Linguistique d’Études Chamito-Sémitiques, Paris, 30 Nov 2000.
- * ‘Les zodiaques moyen perse et sanscrit et leur origine babylonienne’, presentation given at the Science and Literature workshop organised by Monde iranien (inter-disciplinary research unit 7528, CNRS), Paris, 22 Jun 2001.
- * ‘Sur l’origine du nom de la constellation de la Vierge’, presentation given at a session of the Société asiatique, Paris, 9 Nov 2001.
- * ‘Données sur l’uranographie babylonienne aux III^e/II^e millénaires av. J.-C.’, presentation given at the *Science and Literature workshop* organised by Monde iranien (inter-disciplinary research unit 7528, CNRS), Paris, 26 Jan 2002.
- * ‘De Babylone aux Latins et aux Arabes: les noms de la constellation de la Balance’, presentation given at the *III^e Journées de L’Orient*, a conference organised by the Société asiatique and the Université Michel Montaigne-Bordeaux 3, Bordeaux, Pessac campus, 3-4 Oct 2002 (to be published in the conference proceedings).
- * « Les héritages mésopotamiens et arabes dans le ciel étoilé », presentation given to the Université of Sfax, Tunisia, 10 May 2007.
- * ‘Les noms du zodiaque dans l’espace turco-arabo-persan’, presentation given at the 3rd International Conference, *Emprunt linguistique dans l’espace turco-arabo-persan et méditerranéen*, organised by ERISM and INALCO with the support of IFPO, the University of Damascus and AUF, 18–19 December 2005, Rida Saïd Centre, Damascus.
- * ‘Aux origines du zodiaque babylonien: une nomenclature’, presentation to GLECS, Paris, 26 April 2006.
- * ‘Le point sur l’origine mésopotamienne du signe zodiacal du *Bélier*’, presentation to the 5th *Journées de L’Orient* organised on the theme of ‘The Centre and the Periphery’ by the Collège de France, the Société Asiatique and the CNRS, Paris, 31 May–1 June, 2006.

For further information on the work and publications of Roland Laffitte, see www.selefa.asso.fr.

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