i-Medjat

n°7 novembre 2011

Papyrus électronique des Ankhou



Revue caribéenne pluridisciplinaire éditée par l'Unité de Recherche-Action Guadeloupe (UNIRAG)

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Editorial

Ce septième papyrus électronique des Ankhou commence par un hommage rendu par le Professeur Oum Ndigi à Jean Leclant, Secrétaire perpétuel de l'Académie des Inscriptions et Belles Lettres, récemment disparu.

Le Professeur Jean Leclant n'avait de cesse d'encourager le déchiffrement du passé avec les moyens de l'avenir, et les hommes d'aujourd'hui, de tous les continents, à se rencontrer autour des temps anciens, construisant des fraternités nouvelles.

Aussi est-ce avec émotion que nous l'évoquons aujourd'hui.

Et que nous consacrons le septième *i-Medjat* à des champs de recherche toujours plus larges, des espaces nouveaux - lus du ciel ou sauvés des eaux, à de nouveaux moyens technologiques, à la mise en bouquet de nouvelles approches.

Hommage à Jean Leclant

Oum Ndigi
Université de Yaounde I

Jean Leclant vient de disparaître de notre monde visble, le 16 septembre 2011, à l'âge respectable de quatre vingt-onze (91) ans, mais son esprit demeuré jeune et bienveillant, continue et continuera à travers son œuvre immense à vivre parmi nous. Et particulièrement nous, les Africains du continent et de la diaspora. Beaucoup plus qu'un orientaliste et un égyptologue de réputation mondiale, ce qu'il était assurément, il s'est révélé à moi, comme un savant universel, profondément humaniste, généreux, pondéré, respectueux et admiratif de l'excellence de l'éthique pharaonique de Maât, la "vérité-justice" qu'il n'a pas hésité à présenter comme un modèle-racine des valeurs sur lesquelles repose une institution comme l'UNESCO, dont à son avis, celle-ci devrait encore retenir quelques aspects pour promouvoir " *une confiance mutuelle assurant les fondements d'un monde habitable et acceptable : humain*".

C'est à l'occasion du Colloque International sur l'œuvre de Cheikh Anta Diop et la renaissance africaine, commémoratif du 10ème anniversaire de sa disparition, organisé du 26 février au 02 mars 1996 à Dakar, que va s'ouvrir le chemin conduisant à ma première rencontre deux semaines plus tard, à Barcelone, avec Jean Leclant, dont j'allais devenir un ami et un "*parfait collègue*" (selon ses propres termes, en 2008).

L'ouvreur de ce chemin (*oupou ouaout pou*, en égyptien) ne fut autre que Alain Anselin, qui me présenta à l'historien africaniste catalan Ferran Iniesta. Ferran venait de découvrir certains de mes articles, dont celui portant les nombres, publié dans *Discussions in Egyptology* et n'hésita pas à m'inviter en dernière minute au Colloque organisé par le *Centre d'Estudis Africans* de Barcelone du 18 au 22 Mars 1996. Ce Colloque, comme par hasard ?, présidé par Jean Leclant, avait pour thème *l'Afrique antique. L'Egypte antique, une civilisation africaine.* Bon nombre de spécialistes y prenaient part, dont Alfred Muzzolini, Christopher Ehret, Mubabinge Bilolo, Béatrix Midant-Reynes, Alain Anselin. Dès l'ouverture du Colloque de Barcelone, à la suite de l'exposé, portant sur le dispositif rupestre des "femmes ouvertes" du Messak Settafet libyen, du préhistorien et anthropologue français Jean-Loïc Le Quellec pour qui le mythe basaa d'origine de l'humanité connu sous le nom de ***Ngok Lituba*** "*la Roche percée*" pouvait en être une référence lointaine, j'avais relevé l'intérêt méthodologique et souligné la portée hautement heuristique de ce rapprochement. Pour étayer mon propos, j'avais évoqué la figure symbolique égyptienne de l'oiseau à tête humaine, ***ba ânkh*** (en copte, ***baï ônk***) qui coïncide avec le nom caractéristique et révélateur du rossignol en langue basaa (bantu A43) : ***mut baongi*** littéralement "personne (***mut***) de l'être (***ba***) vital (***ongi***). A ma grande surprise, Jean Leclant, accompagné de son épouse, tous les deux prenant l'air sous la véranda de la salle de conférence pendant la pause, s'était approché de moi pour me dire à quel point il avait été impressionné par mon raisonnement et mon rapprochement, et m'avait exhorté à publier un article sur la question.

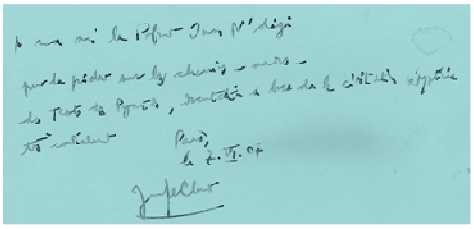
La suite, toute une histoire à elle seule, peut-elle se résumer dans la manière dont je devais marquer, bien malgré moi, cet académicien de renom, et comment ce dernier devait me marquer à son tour d'une empreinte indélébile et inoubliable, au cours des quinze ans suivantes ?

La deuxième rencontre fut la soutenance, le 13 octobre 1997 à l'Université Lumière Lyon 2 de ma thèse de Doctorat en "*Langues, histoire et civilisations des mondes anciens – spécialité Egyptologi*e", dont il fut le président du jury, thèse dirigée par le Pr. Jean Claude Goyon.

La troisième rencontre eut lieu six ans plus tard, le 02 avril 2003 dans son bureau de l'Académie des Inscriptions et Belles-Lettres à l'Institut de France, à l'occasion d'une mission de recherche qui m'avait conduit en France en provenance de l'Université de Yaoundé I ou j'avais été recruté en 1997 comme enseignant au département d'histoire. Nous avions alors échangé pendant près d'une heure.

Au cours d'une autre mission de recherche en France effectué en 2007, je fus reçu deux fois par lui le 30 mai et le 07 juin toujours dans son bureau sous la Coupole. Et c'est le 07 juin 2007 que Jean Leclant me fit cadeau exceptionnel de son propre exemplaire des *Textes des Pyramides* de Pépi 1er, me le dédicaçant en ces termes :

A mon ami le Professeur Oum Ndigi pour le guider sur les chemins ardus des Textes des Pyramides, documentation de base de la civilisation égyptienne. Très cordialement.
Paris le 07 juin 2007



Notre dernière rencontre a eu lieu le 22 juin 2008, toujours dans son bureau de l'Institut de France.

Je ne saurais omettre au terme de cet hommage les nombreux échanges épistolaires que nous avons entretenus pendant quinze années dans des termes d'une grande et exquise cordialité.

Un très grand maître de l'Egypte africaine s'est est allé. Que l'ancien Secrétaire Perpétuel de l'Académie des Inscriptions et Belles-Lettres repose en paix, pour l'éternité.

Je n'ai pas le moindre doute qu'il sera déclaré ***maâkherou***, *justifié*, à jamais.

Developing ArchaeoAstronomy and Space Archeology in the XXIth century

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Abstract: This article lies in direct line with the one published in i-Medjat n°6 (Gadré, 2011). Ihere first detail the characteristics common to Archeology and Astronomy, then explain how the crossing of these two disciplines can give rise to two sub-disciplines of great scientific interest: Space Archeology and ArchaeoAstronomy. Next, I suggest a new way of developing these two research areas: implementing, on the Culture Diff' website (**www.culturediff.org**), two Web interfaces dedicated, the one to Space Archeology, the other one to (Egyptian) ArchaeoAstronomy.

1. Introduction to Astronomy and Archeology

By definition,

✔ Astronomy is a natural science that deals with the study of celestial objects such as stars, planets, comets, star clusters, nebulae, galaxies. Doing Astronomy consists in collecting and analyzing informations relating to the characteristics, the movements and the distribution of these objects filling the sky in order to recount, as reliably as possible, the history of our Universe and the evolution of its content since the Big Bang (about 13 billions years ago);

✔ Archeology is both a science and a humanity that deals with the study of past and present mankind traces such as artifacts, monuments, biofacts and cultural landscapes. Doing Archeology consists in recovering and analyzing these material culture and environmental data in order to recount, as reliably as possible, the history of human beings and societies as well as the human and cultural evolution since the birth of mankind (about 4 millions years ago).

Regarding these definitions, Astronomy and Archeology share several common features:

✔ Astronomy / Archeology intend to recount the birth and the evolution of our Universe / of Mankind since the last 13 billions years / 4 millions years, through the study of material remains: celestial objects / mankind traces;



Figure 1. *Galilee pointing its telescope towards the sky (around 1610)*

✔ the one and the other research topics are of great interest to the general public: the youth, the amateurs, the enthusiasts.

✔ Astronomers / Archaeologists are used to developing, to aid investigations in their respective disciplines, or to integrating, in their respective disciplines, modern scientific techniques and technologies: broad spectral-band survey, geophysical survey techniques, 2D-3D mapping, computer-built topographical models, computer simulation, chemical analysis, statistical tools, etc;

✔ for long, Astronomers and Archaeologists surveyed the sky and the earth from the ground surface (**Figure 1**).

Since the seventies, these surveys can be made from space (**Figure 2**). The use of space imagery, characterized by an always higher spatial resolution and an always broader spectral resolution, led to the discovery of tens of thousands of unknown celestial objects / mankind traces (Gadré, 2011).



Figure 2. *The city of Tanis, Egypt, as seen in the infrared band (NASA photograph)*

2. Crossing Archeology and Astronomy

Archeology and Astronomy rely on cross-disciplinary research (see §1.). In turn, the crossing of Archeology, Astronomy and tools developed for the needs of Earth and Universe Sciences (numerical models, space imagery), can give rise to various sub-disciplines among which ArchaeoAstronomy and Space Archeology. For the recall (Gadré, 2011),

✔ Space Archeology consists in detecting, through the capture next the analysis of space imagery, mankind traces (roads, irrigation canals, cities, monuments, habitat, etc ...) which can not be seen from the ground surface since they lay beneath a lush vegetation, modern cities or the earth surface;

✔ ArchaeoAstronomy is the study, through the development and the use of dedicated numerical models, of the astronomical orientation and/or content of archaeological vestiges: monuments, drawings, bas-reliefs, texts.

Naturally, the archaeological vestiges discovered through the use of space imagery can later be studied in an ArchaeoAstronomical context.

3. Developing Space Archeology and ArchaeoAstronomy

Developing Space Archeology and ArchaeoAstronomy requires:

✔ strengthening collaborations between researchers coming from the humanities (archaeologists, historians, linguists) and natural sciences (astronomers, geophysicists, experts in image processing). This can be done by creating a scientific committee;

✔ crossing the knowledge, skills and tools specific to Archeology, History, Astronomy,
Geophysics, next develop new approaches and tools;

✔ disseminating, to the general public, the results of research works into Space Archeology and ArchaeoAstronomy through the following modes:

➢ journals dedicated to Archeology, Astronomy, etc;

➢ websites and social networks (www.culturediff.org, academia.edu, twitter, etc) ;

➢ press articles, interviews, reports, etc;

➢ art and science shows, planetarium shows.

In order to enhance collaborations between researchers coming from the humanities and natural sciences, the crossing of knowledge, skills and tools specific to Archeology, History, Astronomy and Geophysics, finally, to raise an interest in Space Archeology and ArchaeoAstronomy among the general public, I started to implement, at www.culturediff.org (YooKan.org rubric), two Web interfaces dedicated, the one to Space Archeology, the other one to Egyptian ArchaeoAstronomy.

These two Web interfaces are designed to make available to anyone willing to contribute to the development of Space Archeology or Egyptian ArchaeoAstronomy:

✔ a set of information resources (available space imagery, articles, books, dissertations,
etc);

✔ the detailed description of the archaeological remains discovered by means of satellite
imagery and/or of interest in the field of ArchaeoAstronomy;

✔ a set of software resources (softwares leading to analyze and process space imagery,
softwares dedicated to ArchaeoAstronomy, etc);

✔ a collaborative workspace (a mailing list, a Twitter account and a wiki) between the
members of each project;

✔ a publication area of the results obtained, validated or being validated.

4. Scientific interests

Developing Space Archeology and Egyptian ArchaeoAstronomy has the following advantages:

✔ in astronomical terms: checking the validity of the astrometric and photometric
algorithms (Gadré, 2011);

✔ in archaeological terms: introducing new tools: space imagery, Virtual Observatory;

✔ in egyptological terms: better knowing the achievements of the Egyptian people.

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Submarine Archaeology and Underwater Cultural Heritage

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Submarine Archaeology. As a result, submarine *archaeological* sites can incorporate a vast range including: submerged indigenous sites and places, where people once lived, that have been covered by water due to rising *sea levels*; wells, cenotes, wrecks (*shipwrecks; aircraft*); the remains of structures created in water (such as *crannogs, bridges* or *harbors*); other port-related structures; *debris* sites where people disposed of their *waste*, garbage and other items, such as ships, aircraft, munitions and machinery, by *dumping* into the water. Submarine archaeology remains a recent discipline that requires a high level of knowledge and technical experience, currently limited to a small number of experts and states. While professional equipment and a high level of training remain necessary to undertake excavations, such sites are no longer beyond the reach of treasure hunters.

The pioneers. The interest in maritime finds was awoken by the find of the "Nemi Ships" in the 15th century. The "Nemi Ships" were ships built by the Roman emperor Caligula in the 1st century AD at Lake Nemi, in the Lazio region of Italy. After that very little happened, until the invention of helmet diving in the early 19th century. Using helmet divers, the wreck of "Royal George" (sunken 1782) was salvaged around 1830, but not for archaeological reasons. The wreck was simply an obstacle that had to be removed. In 1836, the Dean brothers discovered the wreck of "Mary Rose", and salvaged a few objects. Perhaps this is the first case of underwater investigations, made of historical interest. In 1856, the submerged settlement in the Zürich Lake was investigated by divers and historians. During the following 70 years, many historic ships were salvaged (pillaged) by divers, but only for commercial reasons. The valuables were sold, and a museum would get the rusty iron cannon or minor objects, such as Roman lead anchors. But there was no archaeological investigation. The first systematic archaeological underwater investigation was probably the recovery of the "Nemi Ships" in 1929-1932, which were investigated on land, after being towed ashore. The first case of diving underwater archaeology may have been 1933-1939, when the Swedish warship Elefanten (1564) was investigated by helmet divers together with historians. The breakthrough came after World War II. Thanks to the Scuba ("Self Contained Underwater Breathing Apparatus") diving equipment developed by Emile Gagnan and Jacques-Yves Cousteau, the underwater world became instantly accessible, and many new ancient wrecks were found at a rapid pace. In 1942-1943, Jacques-Yves Cousteau and Emile Gagnan's invention of the aqualung ("a type of diving equipment") made it possible to reach greater sea depths with the result that wrecks were more accessible. A pilot case for archaeology with Scuba divers was the Grand Congloué wrecks in France, investigated in 1951-1957 by Cousteau and Fernand Benoît. When the divers started digging down in the layers covered by sand, they first thought it was one wreck, while in fact it was two wrecks on top of each other. After the Grand Congloué, many underwater archaeology investigations have been made, by pioneer archaeologists, such as Nino Lamboglia, George F. Bass, Peter Throckmorton, and many others. Honor Frost was a pioneer in the field of underwater archaeology, who led many Mediterranean archaeological investigations, especially in the Lebanon and was noted for her typology of stone anchors and skills in archaeological illustration. Frost became a diver soon after Cousteaus's invention of Scuba and she worked as a diver in the early 1950s in France and Italy. In 1959, she went on to work with Joan du Plat Taylor, Frederic Dumas and Peter Throckmorton in Turkey, an expedition that resulted in the discovery of the late Bronze Age shipwreck at Gelidonya (Turkey). In 1968, she led an Unesco expedition to survey the Pharos site in the Port of Alexandria (Egypt). George Bass was the director of the first archaeological expedition to entirely excavate an ancient shipwreck: Cape Gelidonya (1960) (Bass 1961: 267-276). Since directing his first excavation, he has excavated shipwrecks of the Bronze Age, Classical Age, and the Byzantine. The Institute of Nautical Archaeology (INA) began excavating the site of Uluburun shipwreck (Turkey) in 1984, under the direction of its founder George F. Bass and was then turned over to INA's Vice President of Turkey, Cemal Pulak from 1985 to 1994 (Bass *et al.* 1989: 1-29; Pulak 1998: 188-224). During the last decades, shipwrecks and underwater ruins are becoming increasingly accessible (Paine 1997). In recent years, underwater cultural heritage has attracted increasing attention from both the scientific community and the general public.

New techniques and tools. *Although specialized techniques and tools have been developed to address the challenges of working underwater, the archaeological goals and process are essentially the same as in any other context. However, investigating an underwater site is likely to take longer and be more costly than an equivalent terrestrial one. An important aspect of project design is likely to be managing the* logistics *of operating from a boat and of managing* diving operations *(Delgado 1997). The depth of water over the site, and whether access is constrained by tides, currents and adverse weather conditions will create substantial constraints on the techniques that can feasibly be used and the amount of investigation that can be carried out for a given cost or in a set timescale. Some techniques are essentially manual, using simple equipment (relying on the efforts of scuba divers), while others use advanced technology and more complex logistics (requiring a large support vessel, with equipment handling cranes, underwater communication and computer visualization). Marine sites are typically located using the "Global Positioning System" (GPS), a space-based "Global navigation satellite system" (GNSS). Historically, sites within sight of the shore would have been located using transects. A site may also be located by visual surveying some form of marker (such as a buoy) from two known (mapped) points on land. Most sites will need -at least- some form of topographical survey and a site plan showing the locations of artifacts and other archaeological material, where samples were taken and where different types of archaeological investigation were carried out. Environmental assessment of archaeological sites will also require that environmental conditions (water chemistry, dynamic properties) as well as the natural organisms present on the site are recorded. For shipwrecks, particularly from post-industrial age, pollution threats from wreck material may need to be investigated and recorded. The simplest approach to survey is to carry out three dimensional (3D)* surveying *by divers using* depth gauges *and* tape measurements. *Archeologists often have to work in close relation to scientists and engineers, who are in possession of such submersibles as ROV's ("Remote operated vehicles"), HOV's ("Human occupied vehicles"), and AUV's ("Autonomous underwater vehicle"). Where it is not practical or safe for divers to physically visit a site, "*Remotely Operated Vehicles*" (ROVs) enable observation and intervention with control by personnel located at the surface. The low technology approach of measuring using tape measures and depth gauges can be replaced with a more accurate and quicker high technology approach using acoustic positioning.* Remote sensing *or Marine Geophysics is generally carried out using equipment towed from a vessel on the surface and therefore does not require any one, or any equipment to actually penetrate to the full depth of the site. Sensitive sonar, especially* side-scan sonar *or* multi-beam sonar *may be used to image an underwater site.* Magnetometers *can be used to locate metal remains, such as metal shipwrecks, anchors and cannons.* Sub-bottom profiling *utilizes sonar to detect structures buried beneath sediment. A variety of* archaeological sciences *are used in underwater archaeology.* Dendrochronology *is an important technique for dating the timbers of wooden ships.* Archaeobotany *and* Archaeozoology *are significant because plant and animal material can be preserved underwater. Information about metal artifacts can be obtained through* X-ray *of concretions.* Geology *can provide insight into how the site evolved, including changes in sea-level,* erosion *by rivers and* deposition *by rivers or in the sea. The conservation is an important issue, because artifacts recovered from underwater sites need: 1) stabilization to manage the process of removal of water; 2) to be dried carefully, or the water replaced with some inert medium (as the "Mary Rose"); and 3) to be stabilized following absorption of salt or leaching of metals (in the case of artifacts from salt water).*

Future goals. In 2009, the Alexandria Centre for Maritime Archaeology and Underwater Cultural Heritage was established as a European Union project under the "European Union-Tempus III Programme". The project aimed to create a specialized centre for postgraduate studies, which provides education and training at different levels in aspects of maritime and underwater archaeology, and to develop a postgraduate Diploma and Master programmes in Maritime Archaeology and Underwater Cultural Heritage, designed and structured in accordance with European Union standards. In 2010, the Centre for International Heritage Activities (CIE) has implemented several training, capacity building programs appropriate for a number of countries, and taking into consideration the requirements of the UNESCO Convention on the Protection of the Underwater Cultural Heritage. In 2010, the Maritime and Underwater Cultural Heritage (MUCH) activities have taken place in South Africa, Tanzania, Mozambique**,** and Micronesia. In 2011-

2012, the activities will take place in Spain, Morocco, Egypt, Turkey, Kenya, Mozambique, Namibia, and South Africa.

The main goals are: ***1)*** to review previous studies and evaluate the progress made in surveying the sunken harbors and the submerged archaeological sites at the Eastern Mediterranean Area; ***2)*** to exchange experiences with the international community concerning modern technologies in submarine archaeological research, detection and survey; ***3)*** To assess past and present morph-dynamic shoreline changes in diverse areas, as Alexandrian coast and around the Mediterranean Basin, due to sea-level rise and land subsidence; ***4)*** To analyze the stresses on the coastal environment and on the submerged archaeological remains, caused by intense urban development and land-based activities, including pollution, erosion and sediment accumulation; and ***5)*** To recommend a global strategy, integrating sustainable development of coastal areas with the protection of the submerged archaeological sites. Finally, in 2011-2012, my research is focused on the study of the Uluburun and Cape Gelidonya shipwrecks (in Turkey) and the exchange systems in the Levant. Its cargoes remain an invaluable source of evidence for the study of trade, and metallurgy in the Late Bronze Age of the cosmopolitan Eastern Mediterranean world.

Protection of the Underwater Cultural Heritage. The new UNESCO Convention on the Protection of the Underwater Cultural Heritage, adopted on 2 November 2001 by the Unesco General Conference, is the first legal instrument to safeguard underwater archaeological sites on an international scale, providing protection against treasure-hunters, while regulating international cooperation**.** More than three million shipwrecks are lying on the ocean floor today. Hundreds of underwater decorated caves, towns and monuments remain to be discovered (Gestoso Singer 2010).

It was a turning point in the history of attempts to safeguard shipwrecks and other submerged monuments when, on 2 January 2009, the "*UNESCO Convention on the Protection of the Underwater Cultural Heritage*" entered into force. Adopted by Member States in 2001, this is the only convention that is specific to the underwater cultural heritage. Even so, it neither regulates the ownership of heritage nor changes maritime sovereignty zones (Beurier 1989: 45). Its aim is to combat looting and extend to our underwater heritage the same protection offered to sites on dry land. This new instrument should also enable the public to get to know this little-known aspect of our heritage, which is so much more than a few shipwrecks at the bottom of the sea. Untold treasures lie in the depths, sometimes for thousands of years. The UNESCO convention is, however, entering a minefield, when it is applied to safeguard this fragile heritage. While land-based heritage is subject to increasing protection, the looting of our underwater heritage is growing at an alarming rate, and national legislation is very patchy (Brown 1996: 325). Confronted with destruction and looting, the UNESCO Convention has added a series of rules in its Annex regarding archaeological exploration, which aim to act as an added safeguard and directive for national authorities (O'Keefe 2002). By imposing ethical norms of protection, it should eventually eradicate purely commercial operations (Dromgoole 1999). Every time a commercial enterprise from a given country sets its sights on some article that another State thinks is valuable, international cooperation becomes crucial for its protection. But, foolhardy tourists looking for souvenirs, the construction of ports and oil pipelines, mineral prospecting and trawler fishing are also threats. Finally, there remain the inevitable threats posed by nature, such as erosion, tides, storms, tsunamis, etc. The 2001 Convention invites national governments to take measures to prevent or to reduce the impact of such phenomena, by fencing off threatened sites, building cages, or covering them in sand. UNESCO and the European Union have carried out several studies on the effects of climate change on cultural heritage (Scovazzi 2003; Strati 1995).

In brief, the 2001 Convention ***a)*** sets out basic principles for protecting underwater cultural heritage; ***b)*** contains provisions for an international cooperation scheme; and ***c)*** provides practical guidelines for dealing with such heritage. Joining the 2001 Convention ***a)*** prevents the commercial exploitation and dispersion of underwater cultural heritage; ***b)*** guarantees that it will be preserved for the future and *in situ;* ***c)*** helps the tourism industry concerned; ***d)*** enables capacity building and the exchange of knowledge; and ***e)*** enables effective international cooperation (Gifford *et al.* 1985: 373-376). Nevertheless, while many States have heightened the preservation of their heritage on land, most of their underwater cultural heritage remains unprotected (Carducci 2002). The Convention celebrates its 10th anniversary in 2011. According to the last meeting of states parties to the Convention on the Protection of the Underwater Cultural Heritage, hold in Unesco Paris, on 13-14 April 2011, the Convention has been ratified by 36 States as of 31 December 2010.

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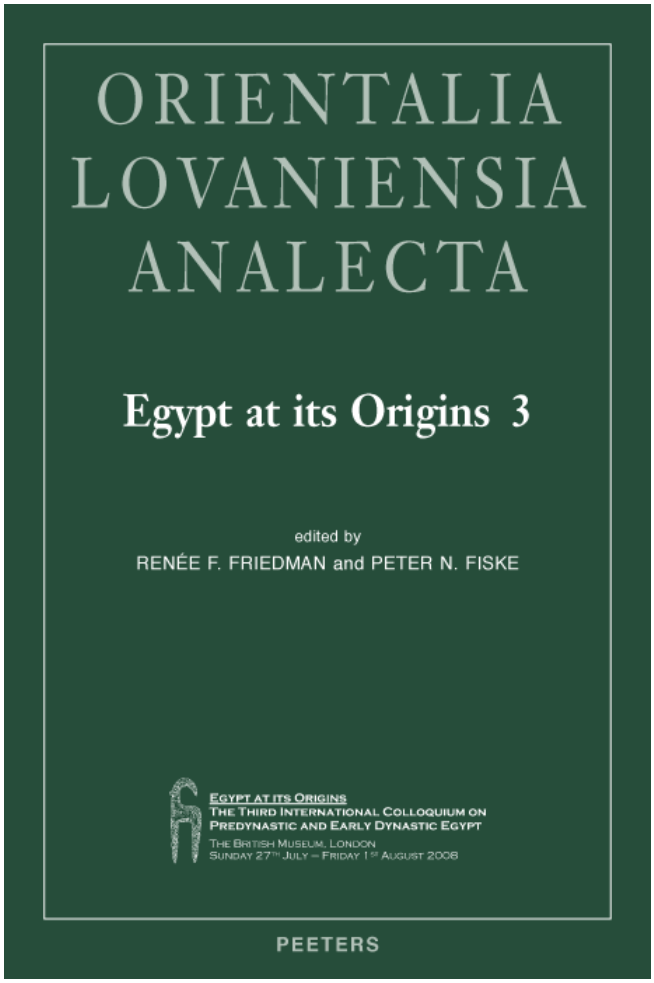
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Egypt at its Origins 3

Proceedings of the Third International Conference *Origin of the State. Predynastic and Early Dynastic Egypt*

London, 27th July - 1st August 2008

Edited by **Renée F.Friedman & P.N. Fiske**

Orientalia Lovaniensia Analecta (OLA) 205

Peeters Publishers, Leuven, 2011

ISBN 978-90-429-2490-1

Edwin van den Brink

Since the publication in the early 1990-ies of the *Thinitische Töpfmarken* (Helck 1990) and the *Corpus and numerical evaluation of the "Thinite" potmarks* (van den Brink 1992), only few studies dealing specifically with Early Dynastic pottery 'inscriptions' have appeared until very recently (Adams and Porat 1996; Engel 1997; Kroeper 2000; Gilroy et al. 2001). Notable exception to this situation are a number of studies dealing exclusively with the incised *serekh*-signs (van den Brink 1996, 2001; Dreyer 1999; Gilroy 2001; Köhler and van den Brink 2002; van den Brink and Braun 2002).

Lately the publication of the final potmark corpus of the Predynastic/Early Dynastic cemetery at Minshat Abu Omar (Kroeper 2000), and the pre-publication of provisional corpora of newly uncovered potmarks, deriving from in particular late Predynastic/Early Dynastic Delta sites at Kafr Hassan Dawood, 102 potmarks (Hassan et al. in press), Tell el-Farkha, 51 potmarks exclusively from the cemetery site (Jucha in press), Tell el-Samara, Tell el-Dab'a/Qana'an and Heluan (cf. Köhler and Smythe 2004), and Adaïma in Upper Egypt (Bréand 2005) have given a new impetus to further this line of research. As a consequence of the renewed interest in Early Dynastic potmarks and with the formal approval of the Scientific Committee of the second international conference on *Predynastic and Early Dynastic Egypt. Origin of the State*, which took place from the 5th-8th of September 2005 in Toulouse, France, an *International Potmark Workshop* was established at the end of the former conference in preparation of the next conference on *Predynastic and Early Dynastic Egypt. Origin of the State*, to be held in 2008 in London, England.

The present data-base driven web-site *Potmark-Egypt.com*, containing over 3360 individual Early Dynastic potmarks, is but a tool- as yet still unfinished- to further and hopefully facilitate research and, through the Forum ,communication amongst the 20 odd participants to this Workshop.

Although the workshop's main focus is on potmarks from the Proto- and Early Dynastic periods (Dynasties 0-2), several workshop participants will bring in their expertise concerning Old Kingdom and Middle Kingdom potmarks as well, thus providing hopefully a diachronic perspective to the subject matter at hand as well as the possibility of a study in contrasts. A first progress report of the Workshop will be presented during the third conference on *Predynastic and Early Dynastic Egypt. Origin of the State* to be held in London, England, in 2008.

For references quoted in this text, as well as for references to other potmark-related publications, go to Bibliography.

The International Potmark Workshop

Publications from 2008 to 2011

Edwin van den Brink, E.Christiana Kohler & Jane Smythe *Intact wine jars with pre-firing Potmarks from the Early Dynastic Cemetery at Helwan, Egypt*, Colloque Pre-histories of writing. Iconography, graphic practices and emergence of writing in predynastic Egypt, Aix-en-Provence, 2011, in press.

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Edwin van den Brink *Potmark-Egypt.com* [in:] Cahiers Caribéens d'Egyptologie n°10,2007,5-8 & [in:] Béatrix Midant-Reynes and Yann Tristant (eds.) with the collaboration of J.Rowland and S.Hendrickx, *Predynastic and Early Dynastic Egypt. Origin of the State 2*, Peeters, Leuven, 2008,237-239.

Edwin van den Brink *Two Pottery Jars Incised with the Name of Iry-Hor from Tomb B1 at Umm el-Ga'ab, Abydos* [in:] E-V. Engel, V. Müller and U. Hartung eds., *Zeichen aus dem Sand. Streiflichter aus Ägyptens Geschichte zu Ehren von Günter Dreyer,* Harrassowitz, Wiesbaden, 2008, 655-660.

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Gaelle Bréand *Signes sur poteries et enregistrement comptable en Égypte pré et protodynastique. L'exemple du signe des "bâtons brisés"* [in :] Cahiers Caribéens d'Egyptologie n°11,2008,37-82.

Gaelle Bréand *The Corpus of Pre-Firing Potmarks from Adaïma (Upper Egypt)* [in :] British Museum Studies in Ancient Egypt and Sudan n°13, 2009, 49-72.

Marcelo Campagno *On the Post-firing Potmarks with Human Figures from Naqada* [in :] Journal of the Serbian Archaeological Society 21, 2005, 125-132.

Mariusz A. Jucha *The Corpus of "Potmarks" from the Graves at Tell el-Farkha***.** [in :] Béatrix Midant-Reynes and Yann Tristant (eds.) with the coll. of J.Rowland & S.Hendrickx, *Predynastic and Early Dynastic Egypt. Origin of the State 2.* Peeters, Leuven, 2008,133-150.

Lisa Mawsdley *Provenanced and unprovenanced First Dynasty potmarks from Tarkhan* [in :] Cahiers Caribéens d'Egyptologie n°11,2008,19-36.

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Alain Anselin *Potmarks Studies I. Etude discutée de lectures de potmarks pré-dynastiques* [in :] i-Medjat n°5,2010, 12a-16a.

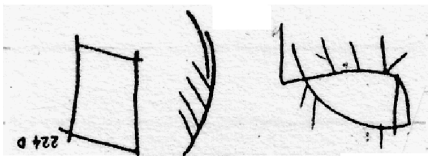
Alain Anselin *Potmarks Studies II. Etude discutée de lectures de potmarks pré-dynastiques* [in :] i-Medjat n°5,2010, 16b-17b.

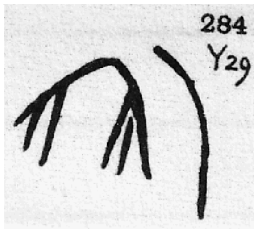
Alain Anselin *Potmarks Studies III. Les potmarks du groupe LXVIII de la base de donnéees de Potmark-Egypt.com* [in :] i-Medjat n°6, 2011,8a-13b.

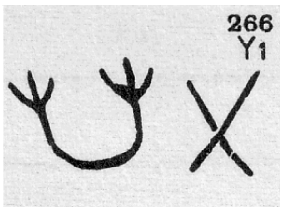
Alain Anselin *L'intention phonétique II. Meret et le pot au lait* [in :] Cahiers Caribéens d'Egyptologie n° 13-14, 2010, 83-102.

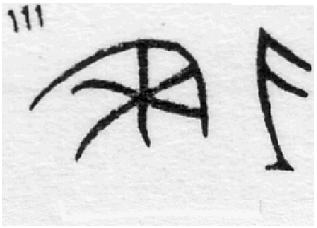
Alain Anselin *L'intention phonétique III: Le potier et le scribe. Potmarks et powermarks prédynastiques: du coté des auteurs.* [in :] Cahiers Caribéens d'Egyptologie n° 11, 2008,83-102.

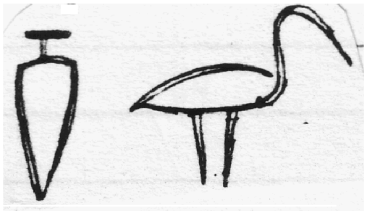
Potmarks











Some *potmarks*

(source : potmark-egypt.com**)**

L'Intention Phonétique VI. Les premiers papyrus et leurs signes : *mḏ3.t*, un nouveau … media.

Alain Anselin

Les données

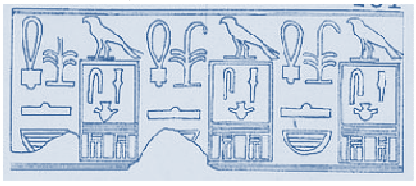
En 1900, William M. Flinders Petrie publie dans le premier volume de ses *Royal Tombs of the First Dynasty*, une série d'impressions de sceaux trouvées dans les tombes royales d'Abydos. Parmi celles-ci, des *sealing impressions* de ***k3/sḫn, nʿr mr, ʿḥ3***, et de plus en plus nombreuses, de Djet, Djer, Merneith, Den, Adjib, Qa'a….(W.M.F. Petrie, *RTI & II*, 1900 & 1901).



Mud sealing with serekh of Hor-Aha, Tomb B10, Abydos, UC 35700, Petrie Museum, London (*photo de l'auteur,2008*).

L'emploi du sceau continue son essor au cours de la Seconde Dynastie, ce que ne manque pas de relever William M. Flinders Petrie dans sa synthèse historique *A History of Egypt* : "*The clay sealings give many titles which are unknown earlier"* (W.M.Fl.Petrie, *A History of Egypt - part One*, ,33).

Une impression de sceau datant du règne de Peribsen attire son attention, celle publiée sous le numéro 164 Planche XXI. Y sont représentés un serekh, ***srḫ,*** surmonté du Faucon et portant donc le nom d'Horus de ***Pr ib sn***, ***sḫm ib***, pourvu d'un complément phonétique initial, **/s-/**, ainsi qu'un titre, nouveau, que William M. Flinders Petrie traduit par "*…the Southern Sealer of all documents (164)*"(W.M.Fl.Petrie, , 33).



Impression de sceau du règne de Per Ib Sen (Petrie,1901, Pl. XXI, n°164)

La traduction, élégante, mais trop géographique, «*Southern*» due à Petrie est concordante avec le fait que la plante-*swt* est l'emblème méridional, haut-égyptien, de la royauté.

Griffiths lit l'inscription ***ḫtm nb ḳm3***, *seal of every document* ((Griffiths, *Inscriptions*, RT I, 1901,53). Le mot ***ḳm3*** *créature, forme* (A.Gardiner, *Egyptian Grammar*, 3rd edition, 1957,596), prend à l'époque classique le déterminatif du rouleau de papyrus pour exprimer la notion de *forme écrite,* et ne semble pas employé avec ce sens avant cette date. Sa lecture n'en est pas moins prudente, qui laisse en suspens la question du support de cette *forme*.

A l'époque, tout début du XX° siècle, où Griffiths écrit ces lignes, l'archéologie n'a pas encore exhumé le moindre rouleau de papyrus dans les tombes royales de la Première Dynastie ; aussi ne peut-il qu'hésiter à identifier le signe d'un objet dont il n'existe alors aucune trace concrète.

En 1938, quatre décennies plus tard, W.B.Emery découvre un *rouleau de papyrus vierge* dans une boîte en ébène de la tombe d'Hemaka, haut dignitaire de Den inhumé à Saqqara, au milieu de la Dynastie I (W.B.Emery, *The Tomb of Hemaka*, 1938, 41). Bien sûr, il s'agit d'un support vierge des signes écrits, hiéroglyphiques, qu'il est destiné à recevoir. Aussi Ilona Regulski précise-t-elle avec raison dans ses travaux de paléographie fondateurs que «*no written papyrus is known to have survived from the Early Dynastic period*».

C'était aussi l'avis, une vingtaine d'années plus tôt, de A.J. Spencer évoquant cette «*ebony box containing a roll of uninscribed papyrus from the tomb of Hemaka*» avant de poursuivre : «*The last is the earliest example of papyrus and its presence may indicate that this writing medium was already in use in the First Dynasty* »(A.J.Spencer *Early Egypt. The Rise of Civilisation in the Nile Valley*, British Museum Press,1993,97).

Ilona Regulski observe que le hiéroglyphe de cet artefact destiné à l'écrit en est attesté dans les inscriptions royales dès le règne de Qa'a, à la fin de la Dynastie I, et en tire les conclusions logiques : «*The existence of this hieroglyph from the reign of Qa'a onwards suggests that papyrus was used as writing material as early as end of the First Dynasty*» (I.Regulski,*A Palaeographic Study of Early Writing in Egypt*,2009,212, 717 et sq.).

Ilona Regulski identifie le signe de l'impression scigillographique du règne de Qa'a comme Y 2, " *a sealed papyrus roll*" (I.Regulski,2009, 212 & 717, ligne 2, colonne 3), et précise «*By that time, it already represented the value* ***mḏ3.t****, «books, contracts»* (I.Regulski, ,2009,212).

Le sceau et le papyrus

Le signe et le mot du rouleau de papyrus *scellé* apparaissent pour la première fois sur deux impressions de sceaux, l'une de la fin de la première dynastie, l'autre du milieu de la seconde, dans des titres qui en attribuent la gestion à un haut-fonctionnaire du pouvoir royal.

La plus ancienne de ces deux inscriptions, datée du règne de Qa'a, à la fin de la Première Dynastie, est lue par Jochem Kahl : ***ḫtm.w mḏ3.t nb.t smˁ.w***, *chancelier de tous les documents de Haute-Egypte*, litt. celui qui scelle tous les papyrus de Haute-Egypte (J.Kahl, *Frühägyptisches Wörterbuch*, Wiesbaden,2004,205, après Kaplony, *Inschriften III*, Ab.266,804).

La lecture : ***mḏ3.t***, du signe horizontal qui figure au dessus de celui de la corbeille sur le sceau «164» de Petrie est conforme aux données archéologiques, qui attestent l'existence du papyrus dès le règne de Den et de son signe plus tard, sous le règne de Qa'a.

L'inscription «164» ne note aucun des éléments grammaticaux que sa syntaxe suggère ; nous devons donc procéder à leur rétablissement en respectant la grammaire de la langue, particulièrement les accords de genre. Nous proposons alors pour lecture du titre du sceau «164», une construction génitivale : ***ḫtm.(w) nsw(.t) mḏ3.t nb(.t),*** *chancelier royal* (litt. *celui qui scelle*) *de tous les documents*. Cette lecture ***mḏ3.t*** nous semble plus pertinente que ***ḳm3***, qui impliquait toutes les formes écrites. Car, bien qu'elles soient des «formes écrites», les stèles ou les tablettes ne supportent pas de sceau ; les poteries en acceptent, mais pas tant que comme documents écrits qu'elles ne sont pas, que comme conditionnements de produits ; restent les rouleaux de papyrus, précisément scellés comme l'atteste le hiéroglyphe Y2 lui-même.

Le signe et le mot du rouleau de papyrus *scellé* apparaissent pour la première fois sur deux impressions de sceaux qui les associent étroitement au sceau lui-même dans leur libellé hiéroglyphique.

Les impressions de sceau, qui témoignent de l'existence du sceau lui-même, sont attestées dès le Nagada IIC-D. Le hiéroglyphe du sceau, S20, apparait dès Djet, Première Dynastie, Nagada IIIC2, sur une inscription gravée sur pierre, et est relevé six fois sous Den, pour moitié sur bois, pour moitié comme impression de sceau (I.Regulski,2009,613). Le signe hiéroglyhique du rouleau de papyrus scellé, Y2 de la Gardiner-list, apparait sur des sceaux, un peu plus tard, sous Qa'a, Nagada IIID. Les deux premières occurrences du signe du papyrus scellé, Y2, l'associent au signe du sceau, S20, dans deux titres de construction semblable : *celui qui scelle tous les rouleaux de papyrus* ***mḏ3.t nb(.t)***.

Le medium du ***mḏ3.t*** qui consigne des messages et/ou enregistre des informations, apparaît ainsi de manière archéologiquement attestée, entre le milieu de la première Dynastie, sous Den, et la fin, sous Qa'a, étroitement associé à l'emploi, un peu plus ancien, du sceau qui en marque le contrôle. Les deux titres, *celui qui scelle* ***tous les*** *papyrus*, associent les deux artefacts dans une relation d'acteur à medium, suggèrent la proximité du rédacteur avec la sphère du pouvoir, et une centralisation élevée de l'administration qui use du medium.

Si la gestion du papyrus fait titre chez les dignitaires du sceau, nous pouvons en déduire logiquement un développement certain de son emploi dans l'administration des hommes et des biens dès cette époque de la seconde partie de la Première Dynastie. Mais, en l'état actuel des données, faute de traces, de papyrus livrant des textes qui restent à découvrir, nous ne connaissons pas l'extension économique et sociologique réelle de l'emploi du rouleau de papyrus scellé à cette époque. Et donc nous ne disposons pas des points de comparaison nécessaires à notre analyse qui soient susceptibles d'en enrichir et redéployer les conclusions. Nous ne saurions, par exemple, préjuger des premiers libellés hiéroglyphiques consignés sur des rouleaux de papyrus, ni de leurs contenus, ni de la variété possible de ceux-ci, encore moins des degrés d'intention phonétique - ni des destinataires.

Nous ne pouvons qu'être assurés que ces manuscrits invisibles et muets nous font actuellement défaut dans l'éclairage de l'histoire d'une écriture dont le développement est parallèle à celui de l'appareil d'Etat.



Ebony seal
Tomb of Djer
Abydos
(Petrie, *RT I*, 1900, Pl. V. 11)



Mud jar sealing
Tarkhan

Poking into medicine in ancient Egypt

Paula VEIGA
Lisboa, Portugal

Without going through all the Classical authors who wrote about medical practices in ancient Egypt, or through the diaries of French and English people stationed in Egypt during the 1700's and the 1800's, who had to stand up and face the reality of diarrhoea and fever, together with poor eyesight and sometimes famine, when the Khamsin blew their eyes, I will elaborate succinctly on what consisted the medical practices in ancient Egypt. And I am also skipping the details about the medical profession, as Jonckheere[1] researched so much about it.

Nowadays computer technology is helping us to discover how ancient Egyptians produced their medicines, space shuttles show that lakes existed under the deserts we see today, whale bones are to be found in the most western desert; our own pharmacies sell pills made with chemical versions of plants' extracts used for the same illnesses, and hair loss is still a problem for many people; just like in ancient Egypt.

Some medical papyri have survived (listed below); one is still being studied by a professional team at the Louvre, but we already know it is about cancer. Cancer did exist in ancient Egypt[2] and before humans existed, as there are dinosaur specimens with traces of a previous existence of a tumour.[3]

The ancient Egyptians already referenced carcinomas (word used for tumour was **'3t**)[4] but they were difficult to distinguish it from other inflammations, such as pustules, abscesses, blisters, pouches of fluid and cysts.[5]

Medical prescriptions from ancient Egypt have been studied by Egyptologists, medical doctors, biologists, dental surgeons, and scientists of all sorts, to figure out how they knew what to use in every case.

Having researched many aspects of ancient Egyptian practices for the well-being of its' citizens[6], I believe it is through the investigation of pathology patterns through human remains and art depictions, as well as texts and ostraca that we can evaluate their ancient knowledge.

Beyond the surviving medical and magical papyri and art depictions, we must pay attention to contemporary Egypt; going there often enables an Egyptologist to see, to hear, to smell and to feel many of the habits Egyptians still have and perform towards any sign of disease or disruption of physical well-being.

We can list some written sources of knowledge, and among those we have to include magical items and personal items such as texts as letters and amulets, because these also give us an understanding of the attitude ancient Egyptians had towards life. Towards death we already know from the Book of the Dead, the Texts of the Pyramids and the Coffin Texts, and other books of the Afterlife, how they perceived their passing.

Important to mention are the primary sources of information about health and medicine in ancient Egypt, the medical Papyri:

Kahun Papyrus UC 32057
Edwin Smith Papyrus
Ebers Papyrus
Hearst Papyrus
London Papyrus BM 10059
Berlin Papyrus 13602
Berlin Papyrus 3027
Berlin Papyrus 3038
Chester Beatty Papyrus
Carlsberg Papyrus VIII
Brooklyn Papyrus 47218-2, 47218.138, 47218.48 e 47218.85
Ramesseum Papyrus III, IV e V e VIII a XVI
Insinger Papyrus
Berlin Papyrus 3033 (*Westcar*)
IFAO Deir el-Medina Papyrus 1, Cairo
Leiden Papyrus I 343-I 345
Schøyen Papyrus MS 2634/3
Tebtunis Papyrus (Greek Papyri) 273, 676, 677, 678, 679, 689
Yale Papyrus CtYBR 2081

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[1] Jonckheere, Frans, 1958, *Les Médecins de L'Égypte Pharaonique*, Édition de la Fondation Égyptologique Reine Élisabeth, Bruxelles

[2] Veiga, Paula, 2009, *Oncology and infectious diseases in ancient Egypt: the Ebers Papyrus' Treatise on Tumours 857-877,* VDM Publishing House Ltd

[3] Nature, 2003, Dinosaurs got cancer, doi:10.1038/news031020-2, http://www.nature.com/news/2003/031021/full/news031020-2.html

[4] Nunn, 1996: 217.

[5] Veiga, Paula, 2010, The precursor of oncology and infectious diseases, The Ebers Papyrus' Treatise on Tumours, 857-877 and the Phyto-pharmacopeia prescribed, *in* BAR S2141 2010, Pharmacy and Medicine in Ancient Egypt *Proceedings of the conferences held in Cairo (2007) and Manchester (2008),*. Oxford

[6] Veiga, Paula, 2009, *Health and Medicine in ancient Egypt; magic and science* (BAR S1967 2009). Oxford

Louvre Papyrus E 32847
Rubensohn Papyrus (*Berlin* 10456)
Vindob Papyrus 3873
Vindob Papyrus 6257 (Crocodilopolis)
Turin Papyrus 54003
Anonymus Londinensis Papyrus
Louvre Papyrus E 4864
Borgia Papyrus
IFAO (Coptic) Chassinat *Papyrus*

As secondary sources the ostraca give us information about medical conditions some people suffered and because of that they wrote to family members asking for medicines; other ostraca show breastfeeding or physical aliments.

Also a primary source of information, human remains give us the best information. Having studied biomedical techniques at the KNH Centre at Manchester, I was able to learn how to take samples from human remains and analyze them in the lab, identify some diseases, cell differentiation, bone structure and deformity, and to learn about other studies on both mummified and skeletized material, that are widely researched and published by renowned scientists like Aufderheide[7], Zink, Nerlich[8], Strouhal[9], Lynnerup[10], Fornaciari[11], Capasso, Campillo and others. DNA tests are already possible on such ancient material data[12] as these microscopic samples, taken with those needles used to take a sample from your lumbar spine...

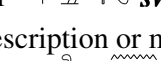
Mummy powder was used in antiquity and through the middle Ages as a powerful all-purpose medicine[13]. Kings took it thinking they would become more like gods after using it for some time.

Mummification gave its' professionals notions about the human body that doctors did not have. That is why many of the hieroglyphic representing medical items are done with animal parts[14].

Some words regarding medical aspects and body parts in ancient Egyptian:

Doctor  ***swnw***

Pill[15]  ***swit***

Prescription or medicine[16]  ***pḫrt***

Skull[17]  ***ḏnnt***

Brain[18]  ***ʿmm***

Nose[19]  ***fnḏ***

Mouth[20]  ***r***

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[7] Aufderheide, A. C., 2003, *The Scientific Study of Mummies* Cambridge University Press; *The Cambridge encyclopedia of human paleopathology*, 1998, Cambridge University Press

[8] Nerlich, A., Zink, A. (2001) Leben und Krankheit im alten Agypten. *Bayerisches Arzteblatt,* 8**,** 373-376.

Nerlich, A., Rohrbach, H., Bachmeier, B., Zink, A. (2006) Malignant tumours in two ancient populations: An approach to historical tumour epidemiology. *Oncology Reports,* 16**,** 6

[9] Strouhal, E. (1976) Tumours in the remains of Ancient Egyptians. *American Journal of Physical Anthropology,* 45**,** 613-620.

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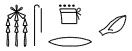
[16] Nunn, 1996: 223.

[17] Nunn, 1996: 219; Ebeid, 1999: 96.

[18] Ebeid, 1999: 96.

[19] Ebeid, 1999: 96; Lisboa, 1978: 281.

[20] Lisboa, 1978: 282.

Ear[21]  ***mḏr***

Eye[22]  ***irt***

Tooth  ***ibḥ***

Stomach[23] (mouth of the heart)  ***r- ib***

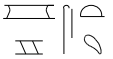
Heart[24]  Ou  ***ib*** ou ***ḥ3ty***

Lungs[25]  ***sm3***

Back bone (vertebral column)  ***i3t***

Womb/abdomen/belly[26]  ***ḫt***

Stomach[27]  ***mnḏr***

Liver[28]  ***mist***  ***mist*** [29]

Spleen[30]  ***nnšm***

Gall bladder[31]  ***wdd***

Bile[32]  ***bnf***

Intestines[33]  ***mḫt***  ***k3b***[34]

Bladder[35]  ***šptyt***

Uterus ***idt***[36]  ***ḫmt***[37]

Pelvis[38]  ***pḥwi***

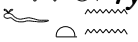
Anus[39]  ***ʿrt***

Kidneys[40]  ***ggt***

Skin[41]  ***inm***

Channels/vessels[42]  ***mt***

Pus[43]  ***ryt***

Sweat[44]  ***fdt***

Menstruation[45]  ***ḥsmn***

Some human body parts were used too, and some vegetal, but essentially animal organs and their body parts. Medical doctors may have learned their profession in the so-called Houses of Life or Per-ankh. Behind Amenhotep III's temple there was a big building, made of adobe bricks, destroyed by an earthquake, according to a seismographer in Dr. Sourouzian's team[46]. This building may have housed a big Hospital/School as Amenhotep III was seriously ill in his middle aged years, and became devoted to Sekhmet, goddess of war and health, ordering this building to have two Sekhmets per day/night (a total of 730). They keep popping up in Karnak constructions erected after him, reusing the materials, at the spot where his temple was too, Kom el-Hittan, and more for sure are still covered by mud, water and crops.

Not going to be exhaustive about the mummification procedures, I just want to note that organs found both *in situ* and in canopic jars provide us valuable information as to their diet, diseases suffered and treatments used. There are a number of articles published about tumours, infectious diseases, broken bones, dentition problems, congenital malformations, atherosclerosis, and other ailments affecting ancient Egyptians.

Heka  «*the art of the magical written word*», was a powerful tool in medical practices as all prescriptions had 'sayings' to be 'sung' over the patient or the ingredients used to treat him/her. The medical doctor was also the pharmacist, as he produced his own medicines, the magician, the exorcist; he dealt with the living and the dead. He exhorted the spirits of deceased family members, gods and other entities to come and help in the cure of the patient. The physician/magician had to 'convince' the spiritual entity to come in his aid, and not against him.

[21] Ebeid, 1999: 96.
[22] Ebeid, 1999: 96; Lisboa, 1978: 281.
[23] Ebeid, 1999: 97; Nunn, 1996: 46.
[24] Ebeid, 1999: 97.
[25] Ebeid, 1999: 97.
[26] Walker, 1996: 290; Nunn, 1996: 222; Gardiner F32, ideogram of animal womb, Gardiner, 2005: 464.
[27] Walker, 1996: 213.
[28] Walker, 1996: 302; Ebeid, 1999: 97; Nunn, 1996: 46.
[29] Walker, 1996: 297.
[30] Walker, 1996: 338,339; Ebeid, 1999: 97
[31] Ebeid, 1999: 97; Nunn, 1996: 46.
[32] Nunn, 1996: 218. Bile as ingredient in medical prescriptions.
[33] Walker, 1996: 313.
[34] Ebeid, 1999: 97.
[35] Ebeid, 1999: 98.
[36] Nunn, 1996: 47
[37] Ebeid, 1999: 97;
[38] Walker, 1996: 334.
[39] Walker, 1996: 247.
[40] Walker, 1996: 278
[41] Ebeid, 1999: 97; Lisboa, 1978: 281. In this word the last hieroglyph can be hair , Gardiner D3, or the leather from the cow' skin , Gardiner F27, as shown here.
[42] Faulkner, 2006: 120.
[43] Nunn, 1996: 224.
[44] Nunn, 1996: 219; Lisboa, 1978: 281.
[45] Nunn, 1996: 221.
[46] http://heritage-key.com/blogs/malcolmj/archaeovideo-saving-pharaoh-amenhotep-iiis-funerary-temple-thebes

Amulets were of critical importance and came in all sorts and for all situations; the main uses for amulets were women, either pregnant, or in labour, breastfeeding[47], children, to be born[48], newborns, infants, people travelling had to be secured from enemies, diseases, and evil spirits.

The ingredients used both in amulets and medical prescriptions could be made of materials given by mother earth such as wood, marine shells, minerals such as precious stones, semi-precious ones, seeds and also animal (skin, horns, wings, blood, hair), and human ingredients such as mother's milk, blood, urine and semen.

There were all kinds of pathologies afflicting the ancient Egyptians, just like we have today. The waters of the Nile gave both life and disease as vermin, bacteriological infections, crocodile bites menaced the ancient Egyptians, but also some fish releasing electrical charges treated psychiatric conditions and migraines.

Plagues were common in ancient Egyptian houses. Rats, snakes and insects disturbed the peaceful life of Egyptians then and now. They had a system of covering house holes with cat fat so rats won't come in (or snakes). A cat is always present in the house to warn off these evils.

Food habits had an impact on lives such as the ones from priests and high officials in temples and administration buildings. They sat around all day and eat the leftovers from the temple offerings; mainly beef, so the mummies we find with clogged arteries are usually form a priest or a high official in the ancient Egyptian administration.

Work load had also an impact on the skeleton of workers such as the ones found in Amarna, where the team from Dr. Rose found severe osteo degeneration, trauma, and a very low life expectancy, given the results from their studies on the remains found at the site[49].

Eye diseases were also common as the desert winds, working with stone and under the scorching sun all day, did not do well to one's eyesight. Many prescriptions are made for treating eye diseases, and those are the most susceptible to the season of the year, as sunlight was a conditional factor.

Other factors in account when making a dose for a prescription was the age of the patient, as children and infants had smaller doses, and the vehicle used to swallow them might also be different (wine, beer, milk).

The Egyptian flora (indigenous and foreign) was widely used and this is the subject of my present research; the association of Osiris and plants with medicinal-magical-religious properties used largely in medical prescriptions.

A description made in Papyrus Salt 825[50] mentions a tree that is very close to Osiris, and therefore, this gave me the idea that some species from the vegetal kingdom must have been considered more important in medicine and magic in ancient Egypt just because they are associated with gods' bodily parts. From the hundreds of plants, trees, bushes, spices and other elements of the vegetal kingdom used in ancient Egyptian pharmacopoeia, listed in prescriptions in the various medical papyri, there are a few with relevance to this study, as they are mentioned in myths related to Osiris and the story of his life, rituals where Osiris is the main god addressed and places where Osiris was worshipped. The fertility rites can also be seen as an attempt to stop the desertification of the land personified by Seth, as the scattered body of Osiris, seen at this light of fertilization, reaches all parts of ancient Egypt. So, it is not all about religion and myth; agriculture is the base for sustenance and the fruits of the earth both used as food and as medicine. Maybe all we need is to use what the land gives us and we could reach a balance in physical life as the one ancient Egyptians seemed to have had. Our antibiotics are nothing else but the bug itself, taken in different doses. The imbalance in the human body caused by disease is either caused by internal or external factors and the ancient Egyptians knew that. They had names for it, different from ours, of course, and some diseases, ingredients and other expressions in medical papyri are still undecipherable, but we will get there.

Medical prescriptions have been translated, some of them more than once; an example of this is Papyrus Ebers[51], and still Egyptologists differ and, as science is in constant evolution and techniques allow new tests to be

[47] Veiga, Paula, 2010, To Prevent, Treat and Cure Love in Ancient Egypt, in *Proceedings of the II International Congress for Young Egyptologists*, October 2006, Lisbon

[48] Veiga, Paula, 2008, Preliminary Research on MNA E40, Proceedings from CRE VIII, 2007, Oxbow Books

[49] http://memorias.ioc.fiocruz.br/p11.pdf; Rose, Jerome C., 2006, Paleopathology of the commoners at Tell Amarna, Egypt, Akhenaten.s capital city, *Mem Inst Oswaldo Cruz,* Rio de Janeiro, Vol. *101*(Suppl. II): 73-76

[50] BM 10051, (715–332 BCE)

[51] Scholl, Reinhold, *The Papyrus Ebers, The largest book role for the medicine of old Egypt*, Leipzig 2002, to be acquired for 5 Euro at the University Library or over the book trade. (UB Leipzig, 2004)
With facsimile: A two-volume colour photographic reproduction of the entire text, including a hieroglyphic-Latin dictionary by Ebers' colleague Ludwig Stern. G.M.Ebers, L.Stern: *Papyrus Ebers. Das hermetische Buch über die Arzneimittel der alten Aegypter in hieratischer Schrift, mit Inhaltsangabe und Einleitung versehen Mit hieroglyphisch-latei-nischem*. W. Engelmann, a Facsimile with a partial translation, 2 volumes, Leipzig, 1875. Available online at the University of Heidelberg Library: http://www.ub.uni-heidelberg.de/helios/fachinfo/www/aegypt/digilit/

done, maybe some of the diseases will be further interpreted and we might even find that some treatments we know of as being used in Greek and Roman medicine were, after all, first performed by Egyptians[52].

As a means to an end we might think that further research in ancient Egyptian practices, whether they are purely scientifical like some prescriptions in the medical papyri, or just magical, acting like a placebo, might give us some hints about the ingredients we might want to develop in a lab and the way medical prescriptions are taken. In an age where so many psychiatric disorders affect so many people, it should be good to be able to use some of the old 'ancient Egyptian magic'.

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Von Klein, Carl, H., Chicago, USA, *The Medical Features of the Papyrus Ebers*, English translation, publication announced and subject by 1000 subscriptions needed to undergo the endeavour; consisted of 650 pages, in red and black, similar to the original, with six plates in one volume, 1905[51]

Ebbell, B., *The papyrus Ebers*, *The greatest Egyptian Medical document*, Copenhagen, Levin & Munksgaard, 1937;

In 1987, Paul Ghalioungui, the head of the medical department at Ain Shams University in Egypt, provided a new English translation, based largely on the *Grundriss* along with the support and encouragement of Wolfhart Westendorf, unfortunately, the book, although printed and bound, was not on sale until 2004, 17 years after Ghalioungui's death.[51]

Ghalioungui, P., *The Ebers papyrus, a new English translation, Commentaries and Glossaries*, Kairo, 1987;

Bardinet, Thierry, *Les papyrus médicaux de l' Egypte pharaonique*, Paris, 1995

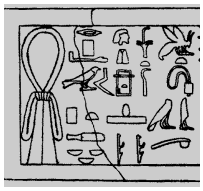
[52] Campbell, 2007, Egyptians, not Greeks, were true fathers of medicine;http://www.manchester.ac.uk/aboutus/news/archive/list/item/?id=2777&year=2007&month=05

Note sur les Médecins égyptiens et leurs compétences

Mouhamadou Nissire SARR

L'inscription d' ***Ỉy m ḥtp*** sur le socle de la statue de Djoser donne une partie des principaux titres du vizir de Netjeritchet, le pharaon Djoser du début de la III° Dynastie : [***ḥtm.w bity, ḥry tp nsw.t ḥḳ3 hwt ʿ3.t iry pʿ.t, m3(3) wr ỉwnw, iy-m-ḥtp, mḏḥ, gnwty,*** (*manquant*)] (D.Wildung, *Imhotep und Amenhotep*, 1977,6) – c'est-à-dire : *chancelier du roi de Basse-Egypte, gouverneur (le premier après le roi) de Haute-Egypte, administrateur du grand Palais, noble héréditaire, Grand-prêtre (celui qui voit le grand de Iwnw) d'Héliopolis, Imhotep*, également *architecte (charpentier-constructeur), sculpteur graveur,* (*fabricant de vases*), est aussi ***mḏḥ nḫn***, architecte de Nekhen sur d'autres inscriptions.





Surtout, Imhotep, était réputé comme  ***ḫry ḥb***, prêtre-lecteur, et  ***zwnw***, fondateur divinisé de l'art médical.

Les deux fonctions ont un rapport. Le titre lui-même, ***ḫry ḥb***, apparait à la II° Dynastie, porté par des hauts fonctionnaires de l'administration égyptienne. Le *khery-heb* était considéré comme le porteur des textes écrits et accompagnait toutes les cérémonies de culte. On le qualifiait aussi du terme de ***s3ḫ*** signifiant *éclairer, illuminer*. A cause de son savoir, il était considéré comme un savant et un magicien. On faisait appel à lui pour donner un nom à un enfant royal. « *Ce sont* (les khery heb) *aussi qui, pendant les cérémonies, récitent les anciennes formules et connaissent les secrets de la magie*. (…) *Ils sont experts dans l'art d'étendre les onguents et ils se servent aussi de cette méthode en tant que médecins*» (A. Erman *La Religion des Égyptiens*, Paris, 1952,.221-222).

Le  , ***zwnw*** ou médecin, est connu par de nombreux textes des Moyen et Nouvel Empires, dont certains, comme le papyrus Smith, révèlent des connaissances sur la chirurgie qui renvoient à l'Ancien Empire. Selon certaines sources, les premiers médecins auraient été d'abord les rois - les pharaons Khéops et Djer sont cités en guise d'exemple. Ce dernier serait l'auteur d'un livre d'enseignement sur l'anatomie (Westendorf, W., «Medizin (medizinisches Wissen, med. Schrifttum)", in: *Lexikon der Ägyptologie*, Band 3, Wiesbaden, 1980, col.1273). La parfaite maîtrise des différentes facettes de la médecine expérimentale couvre la période allant de l'Ancien Empire à la Basse Epoque avec la découverte des papyrus médicinaux en hiératique et le papyrus demotique 6257.

L'historien grec Hérodote s'est intéressé aux différents niveaux de spécialisation de la médecine égyptienne: «*La médecine est répartie en Égypte de cette façon : chaque médecin soigne une seule maladie, non plusieurs. Tout est plein de médecins ; les uns sont médecins pour les yeux, d'autres pour la tête, pour les dents, pour la région abdominale, pour les maladies de localisation incertaine*» (Herodote, *Histoire*, II,84).

De même, vers 200 A.C, Clément d'Alexandrie fait état de six livres de médecine portant sur la constitution du corps, sur les types de maladies, sur les matériaux médicaux, les médicaments prédisposés à soulager les malades, les maladies des yeux, les maladies des femmes. Ils 'agit donc d'ouvrages spécialisés. L'archivage, la rédaction, la mise par écrit, la copie des textes médicinaux, s'effectuaient dans les ***pr ˁnḫ***, *maisons de vie,* où la formation des médecins était assurée.

Le médecin est formé dans les maison de vie. C'est ce que confirme W. Westendorf «*Seine Ausbildung erhielt er(der ägyptische Arzt) im «Lebenshaus», dem er wahrscheinlich auch später als «praktizierender Arzt» angehörte, um sein Erfahrungswissen an den Nachwuchs weiterzugeben*» (Westendorf, W., cité par Stephan, J., *Ordnungssysteme in der altägyptischen Medizin und Ihre Überlieferung in den europäischen Kulturkreis*, Hamburg, 2001, 15).

M. Weber développe le rôle de la maison de vie dans l'administration du savoir médicinal et de sa transmission aux apprenants en ces termes «*Im Lebenshaus wird alle « geheime » Wissen verwahrt. Es existiert dort als eine besondere Abteilung eine Art von Ärzteschule*» (Weber, M «Lebenshaus» in: *Lexikon der Ägyptologie*, Band 3, Wiesbaden, 1980, col.955).

Dès l'Ancien Empire, on constate une spécialisation poussée des médecins et une hiérarchisation des corps de médecins. C'est ainsi qu'apparaissent des titres tels : «*chefs des médecins*», «*inspecteurs des médecins*», «*préposés aux médecins*» et «*directeurs des médecins*».

Les médecins étaient spécialisés dans les branches de la médecine des hommes et des femmes, l'anatomie, la gynécologie, la chirurgie osseuse, les infections pulmonaires, les affections des voix respiratoires, les maladies du système digestif, les migraines, les maladies des yeux, des dents, celle du ventre et même ce qu'on appelerait aujourdhui l'art vétérinaire (Meulenaere de, H.J. «Arzt» in: *Lexikon der Ägyptologie*, Band 1, Wiesbaden, 1975, col.456).

A côte de ces médecins, généralistes ou spécialistes, existent encore les prêtres de Sakhmet et les prêtres exorciseurs qui apparaissaient comme de grands magiciens. Les spécialistes de la littérature égyptienne déterminent trois types de textes permettant de comprendre le fonctionnement de la magie dans le domaine de la médecine.

Le premier corpus concerne les textes dont la récitation évoque l'efficacité de la magie puissante (*Machtzauber*). La récitation des versets de ces textes protégeait des rhumes de cerveau, de la fièvre, des cauchemars, des maux de tête, de ventre, des enflures, des brûlures, ou les guérissait. Les Égyptiens se servaient de ces mêmes textes pour protéger les femmes enceintes et assister celles qui accouchaient. La magie amoureuse appartient aux textes de la puissante magie. Textes conçus avec des recettes qui permettent de fortifier la puissance sexuelle.

Le deuxième corpus appartient à la magie qui nuit (*Schadenzauber*).

A cette catégorie de textes, s'ajoutent les textes d'envoûtement contre Égyptiens, Nubiens et les autres peuples. La plus grande partie des textes magiques rentre dans la catégorie des textes du troisième groupe (*Schutzzauber ou Heilzauber*) censés aider les Vivants à neutraliser les démons de toutes sortes menaçant la vie et le bien être des hommes (Altenmüller, H., «Magische Literatur», in: *Lexikon der Ägyptologie*, Band 3, Wiesbaden, 1980, col.1153).

Vers l'*Egyptologie Moléculaire* ?

Notes sur la paléopathologie dans l'Egypte antique. *

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Etudier l'ancienne Egypte dans son contexte africain peut sembler être un euphémisme pour des géographes ou des biologistes. Divers colloques au Caire en 1974 [(1)], à Barcelone en 1996 [(2)], à Manchester en 2009 [(3)], ont permis aux spécialistes en égyptologie et en anthropologie qui s'y sont rencontrés, de faire la synthèse de leurs travaux sur le contexte africain de l'émergence de la civilisation égyptienne.

Le succès des analyses génétiques à partir d'ADN fossile (ADN ancien) a ouvert de nouveaux chantiers à la paléoanthropologie. Les avancées des techniques de génétique moléculaire permettent aujourd'hui d'exhumer des informations anthropo-biologiques que l'égyptologie classique à elle seule n'aurait pu permettre de discerner. Ainsi, l'intégration de la biologie moléculaire dans les groupes de recherches d'archéologie et d'égyptologie permettra de former cette nouvelle discipline que Z. Hawass, C. M. Pusch et leurs collègues ont désignée sous le terme de «*Molecular Egyptology*» - Egyptologie moléculaire [(4)].

Concernant l'étude des maladies anciennes (paléo-pathologie), les équipes d'Eric Crubézy (Professeur à l'Université Toulouse) [(5)] et d'Albert Zink (Academic Teaching Hospital München-Munich, Allemagne) [(6)] avaient relevé la présence des bacilles de la tuberculose chez des momies du prédynastique et du dynastique, avec des souches du type *Mycobacterium africanum* retrouvées actuellement en Afrique de l'Ouest par le typage ADN. Sur ce point précis on se reportera à l'article de Jean-Philippe Gourdine paru dans les Cahiers Caribéens d'Egyptologie en 2006 [(7)].

Albert Zink et ses collègues ont détecté la présence du parasite unicellulaire du genre *Leishmania* responsable de la Leishamniose (Fièvre Noire ou Kala Azar), à partir d'échantillons d'ADN issues de momies égyptiennes du Moyen Empire et de Haute-Nubie de l'époque chrétienne. Cette maladie est fréquente au Soudan, où elle est liée à son vecteur, le moustique du genre *Phlebotomus*, endémique dans les marais à *Acacia*, *Balanites.* Elle aurait ainsi une origine Est-Africaine [(8)]. Ces données attestent des échanges intenses entre la Nubie et l'Egypte antique au cours du Moyen-Empire Cependant, en l'état des données actuelles, aucun parasite de la Leishmaniose n'a été retrouvé sur les momies du prédynastique et des premières dynasties égyptiennes utilisées pour cette étude.

En 2006, l'équipe d'Albert Zink a recouru de nouveau à la biologie moléculaire appliquée à des échantillons d'ADN de momies du Nouvel Empire et confirmé qu'elles étaient atteintes par la maladie qui touche actuellement l'Afrique sub-saharienne, le paludisme (malaria)[(9)]. Cette maladie tropicale est due à un autre parasite unicellulaire du genre *Plasmodium (P. falciparum; P. vivax; P. malariae, P. ovale)* dont le moustique Anophèle est le vecteur. Sa présence ancienne est attestée dans la zone tropicale en Asie, dans le Bassin Méditerranéen et en Afrique. L'équipe d'Albert Zink a par ailleurs collaboré à l'identification de ce parasite sur la momie du célèbre Toutankhamon. On pourra renvoyer ici le lecteur à l'article, co-signé par une vingtaine de chercheurs, paru dans le Journal of the American Medical Association de février 2010 [(4)]. La malaria n'a jamais fait de discrimination de classe !

Il a été suggéré que de nombreuses hémo-globinopathies héréditaires telles la drépanocytose, seraient des conséquences évolutives liées au paludisme, les porteurs sains seraient protégés de la malaria [(10)]. Il serait ainsi intéressant d'étudier ces maladies du sang à partir d'ADN ancien de momies égyptiennes. A l'heure actuelle, seule l'équipe Rabino-Massa a publié des résultats sur les mutations génétiques et donc conforté l'attestation de la présence de la drépanocytose chez des momies du prédynastique - toutefois sans indication des haplotypes possibles [(11)].

En prenant des précautions quant aux contrôles des prélèvements et des amplifications d'ADN, cette nouvelle discipline de l'«Egyptologie moléculaire» pourrait devenir dans un futur proche le début d'un long voyage revisitant partout l'Histoire, «un nouveau Conte du Naufragé pour les biologistes en route vers l'île de l'égyptologie».

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* reprinted from the Cahiers Caribéens d'Egyptologie 13/14,2010.

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Couple égyptien ancien
(Musée du Louvre)



Maiherpra
(Hierakonpolis Expédition)



Egypt at its Origins 4

Fourth International Conference on Predynastic and Early Dynastic Egypt.

The Metropolitan Museum of Art and the Institute of Fine Arts, New York University, July 26-30, 2011.

The triennial conference **Fourth International Conference on Predynastic and Early Dynastic Egypt** draws together an international group of egyptologists, archaeologists, and anthropologists who are dealing with the origins and the formation of the ancient Egyptian state (ca.4000-2680 BCE). The inaugural meeting, *Origin of the State: Predynastic and Early Dynastic Egypt*, or Egypt at its Origins, was held in Kraków, Poland, in 2002. Following the success of the second meeting Egypt at its Origins 2, in Toulouse, France, in 2005, the third meeting, Egypt at its Origins 3 was held in 2008 at the British Museum, London.



Diana Patch *et* Matthews Adams *accueillent la Conference Origins 4*

The fourth meeting of Egypt at Its Origins or Egypt at its Origins 4, was hosted by the Metropolitan Museum of Art and the Institute of Fine Arts, New York University, and held at the Metropolitan Museum on July 26-30, 2011. Papers were presented in the Museum's Grace Rainey Rogers Auditorium on July 26, 27, 29, and 30, with excursions to the Brooklyn Museum of Art the afternoon of July 27 and to the Museum of Archaeology and Anthropology in Philadelphia on July 28. In addition, a series of posters was available for perusal during the conference in a special exhibition space in the Metropolitan Museum's Egyptian galleries.



Dr.Atif Abu El Dahab, *Deputy Head of the Pharaonic Sector*, Ministry of State for Antiquities, Egypt.

At the close of the conference the location of the next meeting, Egypt at its Origins 5, was announced by **Béatrix Midant-Reynes** as Cairo, where it will be hosted by the ***I**nstitut **F**rançais d'**A**rchéologie **O**rientale* in 2014.



Les colonnes qui suivent ne saurait tenir lieu des *Compte-Rendus* qui restent à faire d'une Conférence remarquable par sa richesse humaine et scientifique. Elles n'ont pas d'autre but que d'en évoquer l'ambiance en quelques photographies mises gracieusement à notre disposition par l'une des conférencières, Gaelle Bréand.

Les résultats des fouilles de Tell el Farkha, du Gezira Program (delta), d'Abydos, de Hierakonpolis, d'Aswan et de son environnement saharo-nubien, ont été les temps forts d'Egypt at its Origins 4 - les questions relatives à l'art rupestre, aux palettes, aux poteries et à la chronologie ont aussi fait l'objet d'avancées complétant les travaux des trois premières Conférences (voir les *Actes* d' *Origins 1, 2 et 3*).

Tell el Farkha.



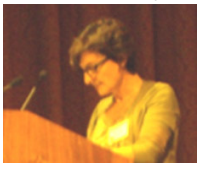
Krzysztof M. Cialowicz brossa les *Beginnings of the Naqadan Occupation of the Nile Delta*, completé par les communications de **Piotr Kolodziejczyk** (*The Nile Delta Before the Naqadans*) et **Mariusz A.Jucha** (*The Northeastern Part of the Nile Delta During the Naqada III).* Vinrent ensuite deux communications de **Marek Chlodnicki** et **Joanna Debowska-Ludwin** sur les commencements de la *Mudbrick Architecture.* **Michał Kurzyk** et **Grzegorz Pryc** portèrent respectivement leur attention sur les *artefacts d'ivoire et d'os* et les *vases de pierre* de Tell el Farkha. **Agnieszka Maczynska**, en s'appuyant sur une étude comparative des poteries d'Adaïma et de Tell el Farkha, intégra enfin les résultats des fouilles dans une perspective des interactions entre la Haute-Egypte nagadéenne et la Basse-Egypte au IV° millénaire à partir du Nagada II.

Gezira Program.

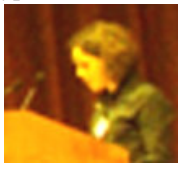


Béatrix Midant-Reynes

Béatrix Midant-Reynes exposa le *Gezira Program: Human Occupation in the Nile Delta During the Fourth Millennium BCE. Archaeology and Environment: A View from Tell el-Iswid (Eastern Nile Delta)*, le site de Tell el-Iswid Sud jouant le rôle d'un premier site-témoin dans les analyses de **Nathalie Buchez** (*Predynastic Mudbrick Settlement Architecture*) et de **Gaëlle Bréand** and **Frédéric Guyot** (*The Corpus of Lower Egyptian Cultures and Naqada III Pottery*).



Nathalie Buchez



Gaelle Bréand



Fréderic Guyot et Günter Dreyer.

Abydos.

Günter Dreyer gratifia la Conférence d'une *Enigmatic Palette (MMA 28.9.8)* éclairant *the Origin of the Horus Name,* **Baruch Brandl** reconsidéra *The Sealings and the* ***pr-wr*** *Labels from the Tomb U-j at Umm el-Qaab.* **Rita Hartman** et **Ulrich Hartung**, produisirent les résultats d' une brillante étude sociologique, *Social and Gender-Specific Differentiation in Predynastic Cemetery U at Umm el-Qaab.* **Vera Müller** clotura la session avec *Evidence for Chests and Boxes from the Royal Tomb of Den at Abydos*).



Heiko Riemer et Ulrich Hartung

Hierakonpolis

Renée Friedman présenta la poursuite des fouilles de *Hierakonpolis* ***HK6*** *- The Tomb 16 Complex,*



Renée Friedman

Masahiro Baba, les fouilles du site ***HK11C*** et **Izumi H. Takamiya,** *A Heating Installation and a Granary at Hierakonpolis Locality* ***HK24B*** – recherches éclairées par les travaux sur la faune nilotique dus à **Xavier Droux** et ceux de **Sean Dougherty** *sur les restes humains du cimetière des élites.* **Fred Hardtke** (*Occupation and Settlement at Hierakonpolis: A Rock Art Perspective*) et **Branislav Andelkovic** (*The Molding Power of Ideology: Political Transformations of Predynastic Egypt*) replacèrent la formation du pouvoir et son iconographie dans la perspective des données archéologiques.

Une Conférence riche, dense, poursuivant le développement des avancées des trois précédentes par d'autres communications encore : celles de **E. Christiana Köhler** (*The Relative Chronology of the Egyptian Nile Valley - an Update* et *Archaeological Evidence for Funerary Rituals in the Context of Early Dynastic Tombs at Helwan*);



Maria C.Gatto



Stan Hendrickx

celles de **Stan Hendrickx**, **John C.Darnell**, **Maria Carmela Gatto** & **Merel Eyckerman** (*The Dynasty 0 Rock Art Complex at Nag' el-Hamdulab* (*Aswan*) et **Merel Eyckerman** & **Stan Hendrickx** (*Naqada I-Early Naqada II Decorated Rhomboid Palettes: A Neglected Iconographic Source*); celles de **Diana Craig Patch** *(A Rare Female Figurine)* et de **Marcelo Campagno** (*Kinship, Sacred Leadership, and Conditions for the Emergence of the Egyptian State*).



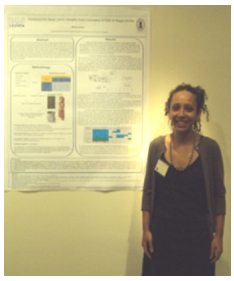
Marcelo Campagno

Nous finirons par celle d'un chercheur dont, à la fin des années 70 et au début des années 80, les travaux sur les *powerfacts* du site de Qustul (Basse-Nubie) furent de ceux qui, avec la reprise des fouilles du site de Hiérakonpolis par l'équipe de Michael A. Hoffmann, donnèrent un nouvel élan à l'égyptologie du prédynastique : **Bruce Williams** (*Tracing Institutional Development Before Detailed Records*).



Bruce Williams

Rayon *posters*, celui de **Marwa Helmy** (*Dressing the Dead: Penis Sheaths from Cemetery N7000 at Nag' el-Deir*) vient heureusement éclairer la statuaire prédynastique - nous pensons au célèbre "*homme de Mc Gregor*" de l'Ashmolean Museum d'Oxford.



Marwa Helmy

La Conférence s'acheva par un retour sur celle de Londres de juillet 2008. **Renée Friedman**, accompagnée de **Sean Dougherty** présenta les Actes d'Origins 3, tout juste sortis de presse, et les offrit aux organisateurs d'Origins 4, **Diana Patch** et **Matthews Adams**.



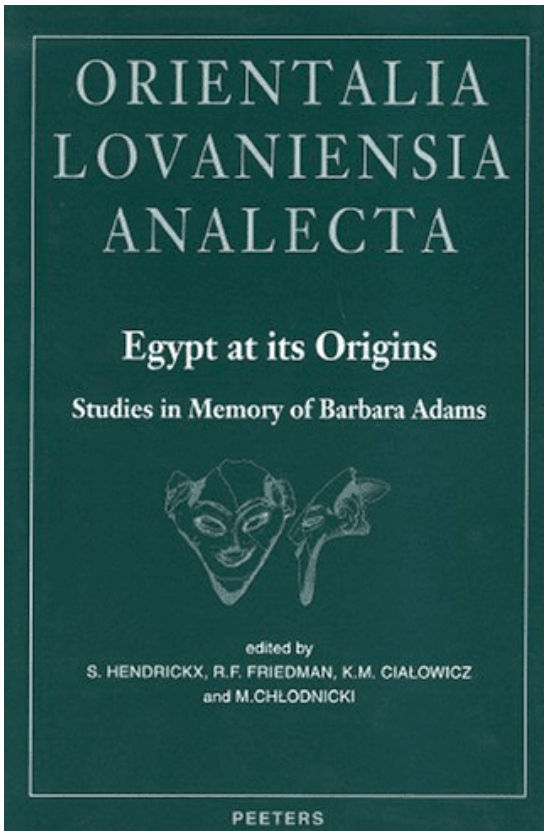
Renée Friedman, Sean Dougherty, Diana Patch, Matthews Adams

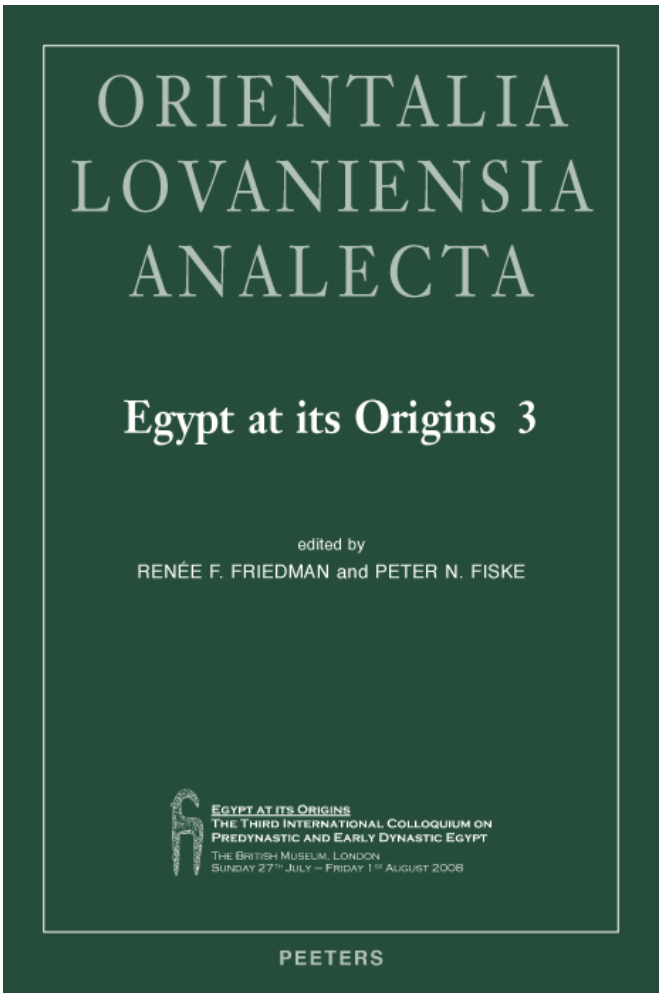
Thanks to **Gaelle Bréand** (photographies) et **Diana Patch** (documentation)

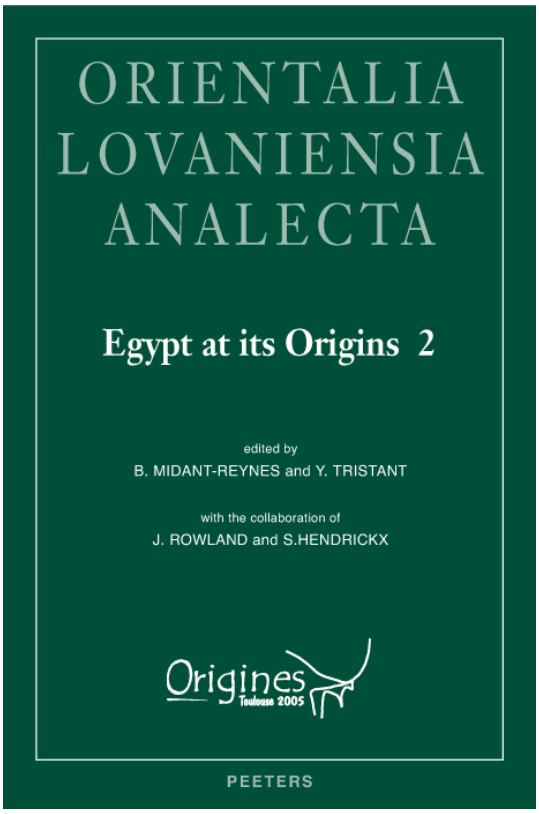
Sources : **http://www.origins4.org/**

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THE BRITISH MUSEUM, LONDON
SUNDAY 27TH JULY – FRIDAY 1ST AUGUST 2008
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B. MIDANT-REYNES and Y. TRISTANT
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J. ROWLAND and S.HENDRICKX
Origines
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