

# The Karnak Cachette Texts Online

## the Encoding of Transliterated Hieroglyphic Inscriptions

Vincent Razanajao<sup>1</sup>, Emmanuelle Morlock<sup>2</sup>, Laurent Coulon<sup>2</sup>

<sup>1</sup>Griffith Institute, University of Oxford, <sup>2</sup>Hisoma Laboratory (CNRS UMR 5189)

## The Karnak Cachette project

Between 1903 and 1907, the French archaeologist Georges Legrain discovered thousands of hidden stone statues, stelae and other objects that were buried in a large pit inside the temple of Amun at Karnak (known as the “Cachette” of Karnak). This ensemble constitutes an extraordinary source of information on the Egyptian clergy and the evolution of local cults. The objects as well as the related documentation now being widely dispersed, and in the absence of a comprehensive inventory of the find, it was decided to create an online inventory and a tool to search this rich corpus. The first version of the online database was launched in 2006. It provided a general description of each object, a label, date of discovery, its various inventory numbers, and a bibliography. Version 2 went online in 2012. It gives access to the complete photographic documentation (more than 8000 photographs). The database is regularly updated.

See: <http://www.ifao.egnet.net/bases/cachette/>

## Current goals

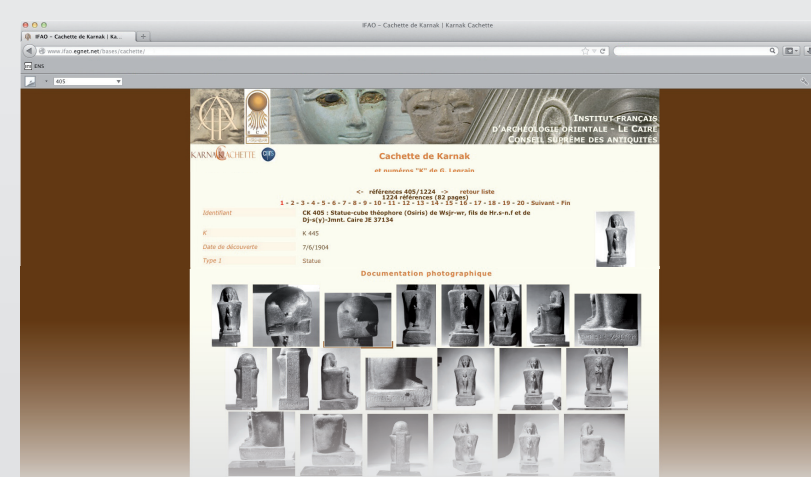
The project aims at developing the tools to encode, search and publish electronically the hieroglyphic texts inscribed on the objects from the Cachette, enabling different types of full-text searches and queries (especially those dealing with titles and prosopographical data).

The version 3 of the database will comprise an electronic epigraphic edition of the corpus of texts with detailed prosopographical data.

The current efforts are focussed on:

- the development and finalization of a user-friendly tool for the encoding, analysis and online publication of the hieroglyphic texts inscribed on the objects from the Karnak Cachette;
- the implementation of TEI/Epidoc standards in ancient Egyptian Epigraphy to serve as a basis for building bridges between text-edition projects within Egyptology.

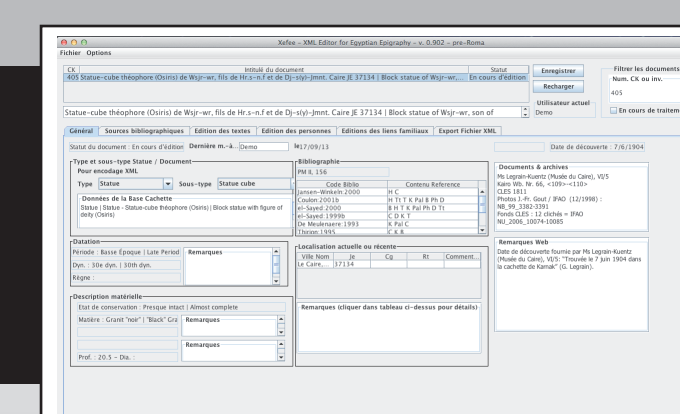
## Xefee Xml Editor For Egyptian Epigraphy



Version 2 of the scientific database, including all the objects from the Karnak Cachette.  
<http://www.ifao.egnet.net/bases/cachette/>

### general information tab

The **general information** tab displays the descriptive data recorded in versions 1 and 2 of the database.



### Hieroglyphic transcription



### Transliteration

(1) jf-ntr hry-sstz b-ntr n pt t2 mr-kat jdnw n pr-sat(-)yt  
(2) r-r-3ht m22 jm(y).s Wsjr-wr m2-hrw s2 mj nn H(r).s-n.f m2-hrw

## Technical layers

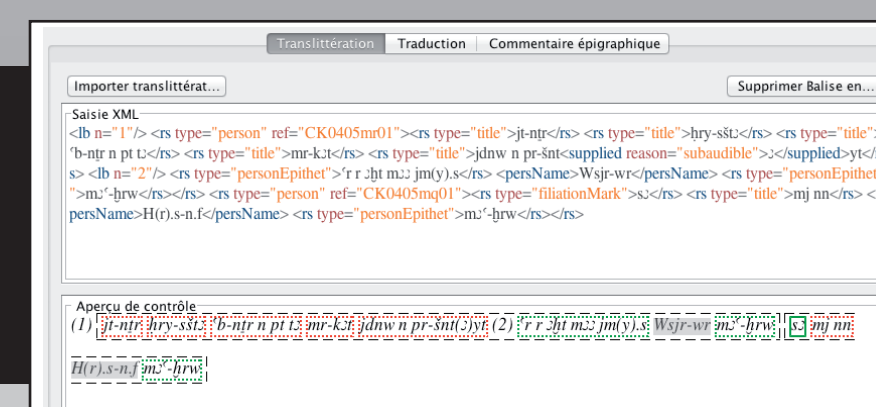
The Karnak Cachette Database, versions 1 and 2, was constructed using FileMaker Pro and published online by using PostGreSQL and PHP within a database publication framework developed for the IFAO.

The Xefee encoding tool is a desktop Java application developed using the Netbeans IDE. In order to fully re-use the already existing scientific and photographic material, as well as to store the new data created throughout the encoding of the texts, Xefee leans on its own MySQL database in which these different kinds of data are merged. Organized around a main “document” table, the data is spread over eighteen tables, four of which being dedicated to the data coming from the related database, and one to the encoded texts.

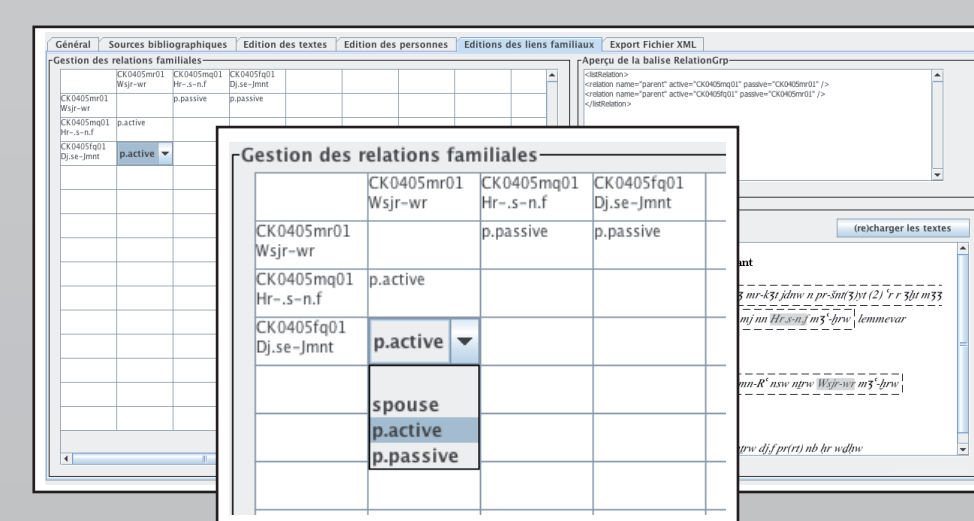
The electronic textual corpus produced with Xefee will be integrated in an Xquery web application on top of a native XML database.

### preview pane

The texts of the Karnak Cachette often occur in compact sequences of personal names and titles, giving parts of genealogical information (e.g. born to the mistress of the house, sistrum player of Amun-Ra, Di-se-Amunet). The XML marking up can then be quite dense. A **preview pane** renders the encoded strings with different border styles or highlighting patterns.

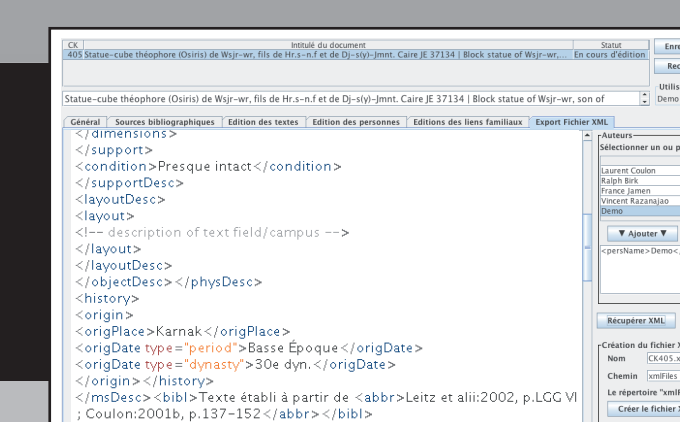


The ancient Egyptian way to present genealogical filiations also required the building of peculiar tools to handle this very important aspect of the text content. A tab of the GUI is dedicated to the creation of the mentioned **person's identities**. Another tab provides a tabular window which offers a practical way to manage the **familial relationships** and generate the <listRelation/> element of the <particDesc/> set of elements in the <teiHeader/>.



### XML/TEI export tab

At the end of the editing process, the user can **generate the XML/TEI file** via the «create xml» button. Xefee picks up in the MySQL database all the required pieces of information and places them between the appropriate XML tags. This creates all the sections of a TEI/Epidoc file, from the headers with the publication and bibliographic metadata to the div elements dealing with the encoded transliterations, translations, apparatus criticus and epigraphical commentary.



## Conclusion and Future Work

In its actual state, Xefee offers a practical GUI front-end for the TEI/Epidoc encoding of ancient Egyptian inscriptions, facilitating the marking up of texts and prosopographical information. The next step is the full encoding of a sub-collection of the corpus (Late Period texts) by a small group of scholars and PhD students with full Egyptological proficiencies. The TEI/Epidoc files created using Xefee will then be poured into a web application (built upon a native XML database). Being a pilot project for digital epigraphy, the Karnak Cachette text corpus may offer a discussion basis for a better standardization of practice in the Egyptological field. The ODD customization may also be discussed and enhanced within the community.

As a prototype of what can be done to articulate a relational database to a structured text encoding in the perimeter of a given project, Xefee may be also adapted to other epigraphical projects from other fields. It will be distributed as an open-source project in the near future.

## Project details

<b>Project Director</b>	Laurent Coulon (laurent.coulon@mom.fr)
<b>Database authors</b>	(versions 1 & 2): Laurent Coulon, Emmanuel Jambon (IANES, Tübingen); IT responsibility: Christian Gaubert (IFAO); Ralph Birk, Laurent Coulon, France Jamen, Sépideh Qaheri
<b>Editors</b>	
<b>Xefee's designer</b>	Vincent Razanajao (vincent.razanajao@orinst.ox.ac.uk)
<b>Programming support</b>	Julien Razanajao (julien.razanajao@sfr.fr)
<b>TEI expert</b>	Emmanuelle Morlock (emmanuelle.morlock@mom.fr)
<b>Funding</b>	IFAO - HISOMA
<b>Partnership</b>	Supreme Council of Antiquities (Egypt)
<b>Photographs</b>	by Jean-François Gout, Alain Lecler and Ibad Mohamed Ibrahim © IFAO-SCA