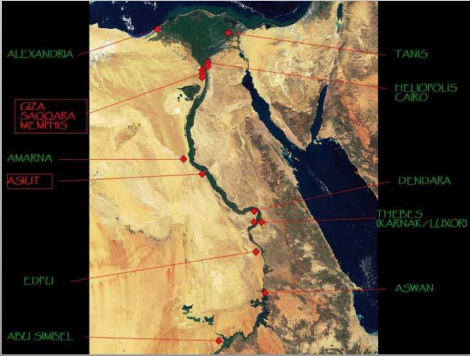


Study and Identification of Ancient Egyptian Polychrome Woods: The Funerary Models of Lyon Musée des Beaux-Arts (France).

Victoria ASENSI AMOROS: Xyldata: victoria.asensi@free.fr.
Gersande ESCHENBRENNER-DIEMER: University Lumière-Lyon 2.
Catherine LAVIER: C2RMF
Sandrine PAGES-CAMAGNA: C2RMF
FRANCE

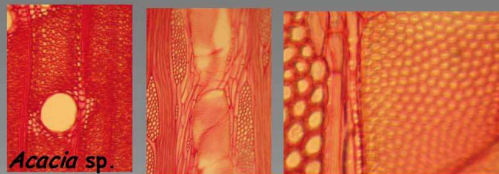
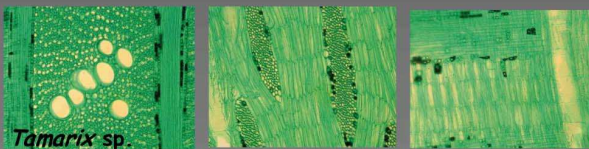
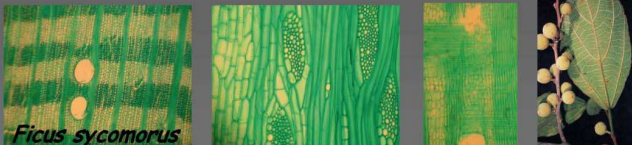


Wooden models appear in the funerary equipment at the end of the IIIrd millennium BC and the beginning of the IIInd millennium BC. Their function was to provide to the dead all the necessary things for a good afterlife: transport, clothes, food, furniture, servants... It is a new way of workers representation (brewers, bakers, joiners and woodworkers...) used on the tombs of the important Egyptian persons at Memphis in the IV and V dynasties (circa 2700-2200 BC).



Wood Anatomy

Use of indigenous species: *Ficus sycomorus* is the most important wood employed and, only in two cases, we have *Acacia* and *Tamarix*. Only one importation tree was used, the cedar (*Cedrus* sp.), specially used for the bases of the scenes and for the small and articulate pieces.

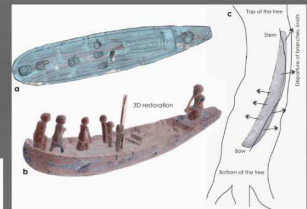
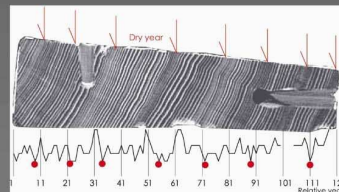


Thanks to this comparative study (including stylistic data), the question of the geographical origin and the dating of the collection was also able to be cleared up, and can be henceforth dated between the second half of the XIth dynasty and first half of the XIIth dynasty for those coming from Meir. The model coming from Saqqara is dated well as for him the VIth dynasty. It is indeed, by its size and its aspect, very close to the other models dated this period.

Archaeodendrometrical examination

Dendromorphology allows to restore wooden fragments to its tree of origin, to define its diameter and its possible age at the time of its cutting and so to estimate the appearance of this tree thanks to the type of growth, the presence of knots and branches, the orientation of fibers.

Traceology, or the study of the indications left with the surface of objects, allow as to say that this boat was realized by a single right-handed craftsman.



A tomographic study was made on it and many photos allowed to build adendro-serie containing 121 measured rings widths in this cedar element.

Colour study

The colours of the studied models don't represent the global palette of the Egyptian polychromy. One can consider red, yellow, white, black with traces of blue on a part of one boat. The red tint is mainly constituted with red oxide, used pure or naturally mixed with potassic clay. The yellow can be obtain with iron oxide (goethite) with or without potassic clay, but one observe some cases with iron sulfates, jarosite and natrojarosite.



Saqqara model

