

**May 2024 Archaeology**

**An Ovoid Vessel in Greywacke**



Fig. 1. Ovoid vessel. FGA-ARCH-EG-0449.

© Photographic credit: Fondation Gandur pour l'Art, Geneva.  
Photographer: André Longchamp.



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## **A Special Artwork of the Month: A Collaboration between a Scholar and the Foundation**

Every year, the Foundation awards scholarships to second or third-cycle students whose research, work's relevance, and academic excellence show promise for their future careers. This initiative fosters beautiful collaborations: each scholar is invited to closely examine a few artworks from the collection and craft notices infused with their knowledge, research perspective, or academic experience.

This month, we present a special Artwork of the Month, curated based on the notices prepared by Dr Vincent Morel, selected while he was writing his doctoral thesis at the University of Geneva and the École Pratique des Hautes Études in Paris; he is now a Postdoctoral Associate and Lecturer at Yale University, USA. His collaborative efforts with the Foundation's two Egyptologists have resulted in a fascinating exploration of the context surrounding objects sculpted in greywacke, a stone with significant symbolism for the ancient Egyptians.



This finely crafted vessel dates back approximately 5,000 years. Its remarkable polish lends it a shiny, almost metallic appearance. During Egypt's early historic period, numerous stone vessels were produced to satisfy the tastes and needs of the dominant upper class. These vessels are one of the most enduring legacies of luxury in ancient Egypt, as most objects from that time have not survived to the present day, especially those made of precious metals.

#### *Ovoid vessel*

Egypt

Naqada III – 2<sup>nd</sup> dynasty

End of 4<sup>th</sup> – early 3<sup>rd</sup> Millennium BCE

Greywacke

26,4 x 18 cm

FGA-ARCH-EG-0449

#### **Provenance**

Collection Philippe « B », France, acquired ca. 1950 ;  
Collection Matossian, France ;  
Christie's, London, 14.04.2011, lot n° 121.

### **Purity of Form**

With its geometrically ovoid and streamlined shape (fig. 1), this Egyptian vessel exhibits an almost contemporary style, despite being fashioned some 5,000 years ago! Crafted from dark green greywacke, the vessel boasts a beautiful smooth and satin-like finish, with several veins and mineral inclusions visible on its body. Despite minor chips, its state of preservation is exceptional. This vase features a squat appearance, characterised by a short neck formed by hollowing out the material under the delicately rounded lip at the top. In the absence of archaeological context and hieroglyphic inscriptions, the typological study of Egyptian stone vessels serves as the only chronological guide. In this case, the lip corresponds to the category known as "cusp rims." Additionally, the general shape resembles type 83 in the typology established by B.G. Aston (fig. 2), although the lip and shoulder also bear similarities to

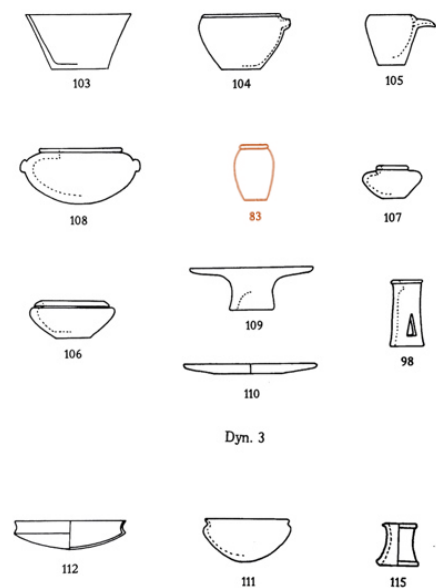


Fig. 2. Stone vessels typology.  
After B.G. Aston, *Ancient Egyptian  
stone vessels*, 84.

type 82.<sup>1</sup> Finally, the vessels rests on a regular, flat bottom, providing perfect stability. Similar vases discovered during archaeological excavations first appeared at the very end of the predynastic period (Naqada III) and continue into the Sixth Dynasty.

This initial, rather broad chronological range can then be further refined through geological research applied to Egyptian objects. Vessels made of greywacke are specifically evidenced between the end of the Predynastic period and the Second Dynasty, positioning our vase at the very onset of the Pharaonic era.<sup>2</sup>

Among similar works present in museum collections, an ovoid vessel housed at the Louvre Museum (inventory E 23034) exhibits a very similar profile, albeit in smaller dimensions (fig. 3). Crafted from greywacke, it suggests the possibility of being produced in the same workshop. However, artisans rarely signed their works, so as enticing as this hypothesis may be, it cannot be confirmed.



Fig. 3. Ovoid vessel in the Louvre Museum (E 23034).  
© Musée du Louvre / Christian Décamps.

<sup>1</sup> ASTON, B.G., *Ancient Egyptian stone vessels*, 84 and 122–123.

<sup>2</sup> ASTON, B.G., *Ancient Egyptian stone vessels*, 84 ; DE PUTTER, T., *et al.*, “Les mille et un vases de pierre des premières dynasties à Bruxelles”, 60, table 5.

## Egyptian Stone Vases: Silent Witnesses of Luxury and Craftsmanship

Stone vases played a crucial role as luxury items and symbols of prestige from the end of the Naqada I period onwards.<sup>3</sup> Their production required a substantial investment in terms of effort and resources, rendering them valuable possessions reserved for the elite and sovereigns.

One of the reasons for their value lay in the raw materials used. Quarries were often located at considerable distances from production centres, making the acquisition of stone costly and its transportation laborious. Moreover, they were often situated in the Eastern Desert of Egypt—an inhospitable area requiring heavy infrastructure for its exploration, especially for the supply of workers. Despite these challenges, the wadis—or dried riverbeds—in this region offer such mineral diversity that the ancient Egyptians, from a very early stage, could not resist visiting them to obtain raw materials such as red breccia, fine limestone, translucent calcite-alabaster, diorite, basalt, or andesite (fig. 4).<sup>4</sup>

Beyond these purely visual and material considerations, stone vessels also held symbolic and ritualistic importance. Deposited in the tombs of the elite and sovereigns, they were believed to ensure the well-being and status of the deceased in the afterlife. Thus, in addition to their initial utilitarian function, stone vessels also served as markers of social status and stand as silent witnesses to the evolving structure of ancient Egyptian society.



Fig. 4. Mineral variety: red breccia (FGA-ARCH-EG-0594), diorite (FGA-ARCH-EG-0529), quartz (FGA-ARCH-EG-0497), serpentine (FGA-ARCH-EG-0403). © Photographic credit: Fondation Gandur pour l'Art, Geneva. Photographers: Grégory Maillot, André Longchamp.

<sup>3</sup> GRAFF, G., "Le matériel funéraire déposé dans les tombes de la culture de Nagada".

<sup>4</sup> DE PUTTER, T. *et al.*, "Les mille et un vases de pierre des premières dynasties à Bruxelles", 59.

## Master Craftsmen

Carving these vessels was no simple task, and their qualities, both aesthetic and technical, demonstrate a remarkably high level of artisanal skill and mastery of tools.

While most stone vessels feature simple and streamlined geometric shapes, they are, in fact, masterpieces of Egyptian craftsmanship. Drawing inspiration from the forms of earthenware vessels, their production required a high level of technical expertise more akin to sculptors' artistry than that of potters.

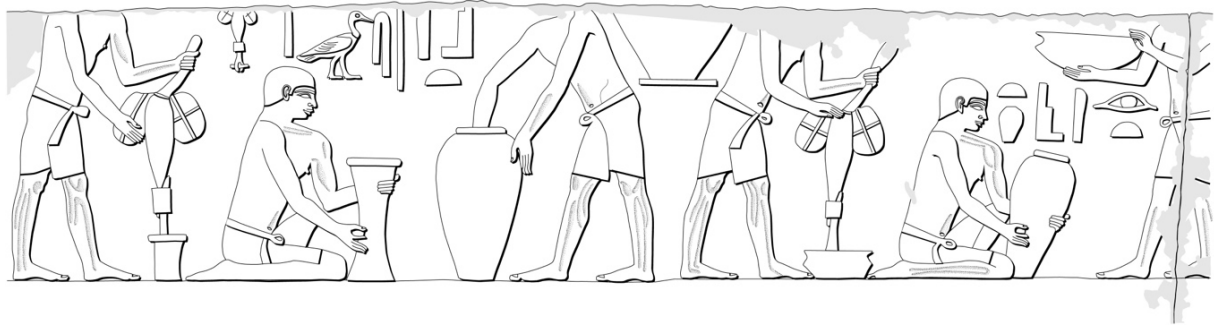


Fig. 5. Stone vessels workshop depicted on a relief from an unidentified tomb at Saqqara (Cairo Museum / Imhotep Museum Saqqara, JdE 39866). After O'NEIL, J.P. (ed.), *Egyptian Art in the Age of the Pyramids*, 123, fig. 73, with the kind permission of Peter Der Manuelian.

The manufacturing process of these vases can be reconstructed thanks to preserved iconographic representations, notably in several Old Kingdom tombs (fig. 5). There, on beautifully decorated walls, painted and carved scenes sometimes depict workshops of stonecutters, shown busy hollowing out and polishing various types of vessels. Remarkably, actual tools discovered at archaeological sites show that these depictions were far from fanciful. Among these findings are specific drilling tools, comprising a wooden mandrel fitted with a corundum in the shape of an “eight”-shaped hard stone drill bit, complemented by a handle weighted with two blocks of stone (fig. 5, far left; figs. 6–7). Notably, the distinctive shape of this tool has also been incorporated into hieroglyphic writing to denote the “artisan” (fig. 6)!

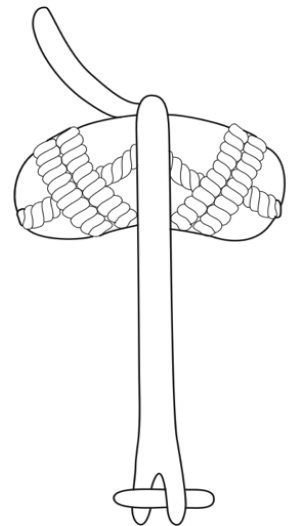


Fig. 6. Hieroglyphic sign, determinative for the word *hemout*, “artisan.” After NAGAYA, K., “Drilling stone vessels at Nekhen”, 15.

Experimental archaeology has provided valuable insights into the methods employed by the artisans, revealing their patience and skill as they meticulously hollowed out the vases.<sup>5</sup> Using replicas of ancient tools, researchers have demonstrated the arduous process, which required artisans to perform seemingly endless rotations to gradually carved out the vessel. This painstaking technique resulted in characteristic fine striations on the internal surface of these vases, left untouched by polishing unlike their exteriors. These scratches not only bear witness to the repetitive labour undertaken by Egyptian artisans but also serve as evidence of the object's likely authenticity; modern tool, faster and more precise, do not leave similar traces on stone.

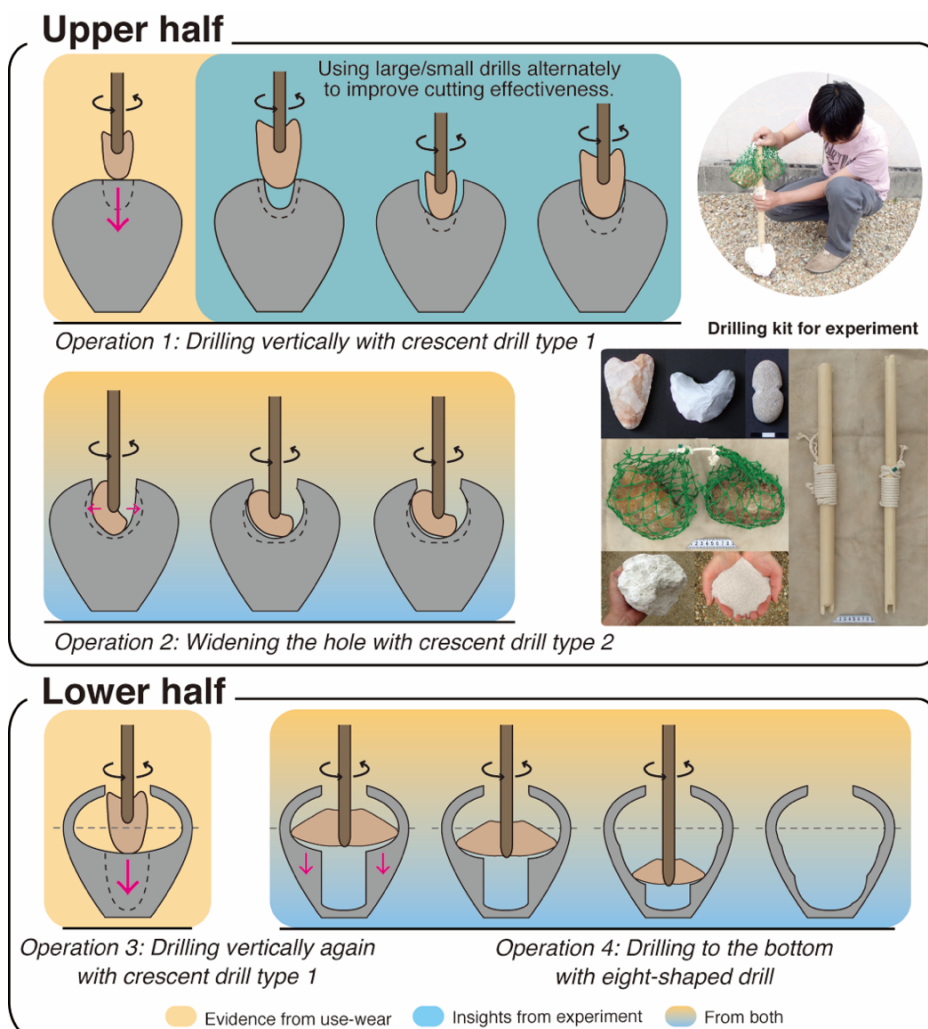


Fig. 7. *Chaîne opératoire* for the hollowing out of a stone vessel.  
After NAGAYA, K., "Drilling stone vessels at Nekhen", 14.

<sup>5</sup> NAGAYA, K., "Drilling stone vessels at Nekhen", 14.

## Greywacke, a Stone with Specific Uses

Greywacke was seldom employed as a construction material in architectural projects, except for small monuments primarily erected during the Late Period. However, it was frequently utilized in statuary. During the Predynastic period, it emerged as the preferred mineral for crafting cosmetic palettes, known since the Badarian period (4500–3800 BCE). On rarer occasions, greywacke was used to fashion small objects, such as stone vessels, pendants, and amulets.

The Foundation's collection includes two such greywacke palettes, each featuring a different animal. The first (fig. 8) takes the form of a fish—a motif traceable to Naqada II and one of the most popular among zoomorphic palettes. Fish thrived in the waters of the Nile, and fishing was widely practiced, as this animal provided an important and "easy" source of animal protein. However, what is quite surprising is that, apart from the palettes, fish are virtually absent from Predynastic iconography! This suggests that, within the specific context of greywacke palettes, fish held a symbolic significance that remains elusive to us. While in the Pharaonic era, the tilapia fish carried strong solar symbolism,<sup>6</sup> applying such concepts to earlier periods risks committing anachronistic interpretations.



Fig. 8. Predynastic cosmetic palette shaped as a fish (FGA-ARCH-EG-0614).

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<sup>6</sup> VERNUS, P., "Tilapia", 283-285.



Fig. 9. Predynastic cosmetic palette shaped as a bird (FGA-ARCH-EG-0670).

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The second palette depicts a "Nubian" guinea fowl, recognisable here by its imposing shape, stylised to the extreme, to the point that its legs are reduced to a simple rounded protrusion. The head and beak exhibit a smooth, sinuous form. Originally, the depressions marking the eyes of both this guinea fowl and the fish were inlaid with small white discs, likely made from ostrich eggshell, imparting a lifelike quality to these objects.

The aesthetic allure of greywacke may partly explain why the emerging elites of the Nile Valley elected to use this specific stone for their palettes. It seems that the quarries and the stone itself were imbued with a strong symbolic power. Through these palettes, greywacke

served as a medium to "support the ideological discourse of the emerging royalty".<sup>7</sup>

### The Wadi Hammamat, Millennia-old Quarries

Referred to as "*bekhen*ston" by the ancient Egyptians,<sup>8</sup> greywacke has often been incorrectly referred to as "schist," "green schist," and even "slate" in modern literature. Once worked by Egyptian artisans, it boasts a homogeneous, smooth, and satin-like appearance, ranging in colour from medium grey to black, with hints of greenish-grey. This so-called metamorphic stone is particularly renowned for its deposit at Wadi Hammamat, situated in the Eastern Desert halfway between the Nile Valley and the Red Sea coastline (fig. 10). However, its deposit extends beyond this single site, and it is plausible that other areas were also exploited.<sup>9</sup> "Prospectors" (*sementy*), documented in Old Kingdom records, played a crucial

<sup>7</sup> MIDANT-REYNES, B., *Aux origines de l'Égypte*.

<sup>8</sup> On this mineral, see esp. DE PUTTER, T., KARLSHAUSEN, Chr., *Pierres de l'Égypte ancienne*, 145–155.

<sup>9</sup> KLEMM, R., KLEMM, D.D., *Stones and Quarries in ancient Egypt*, 2008, London, 307.



role in continuously seeking out new veins. Well-versed in the deserts and their wadis, they were tasked with surveying these regions in search of precious minerals.

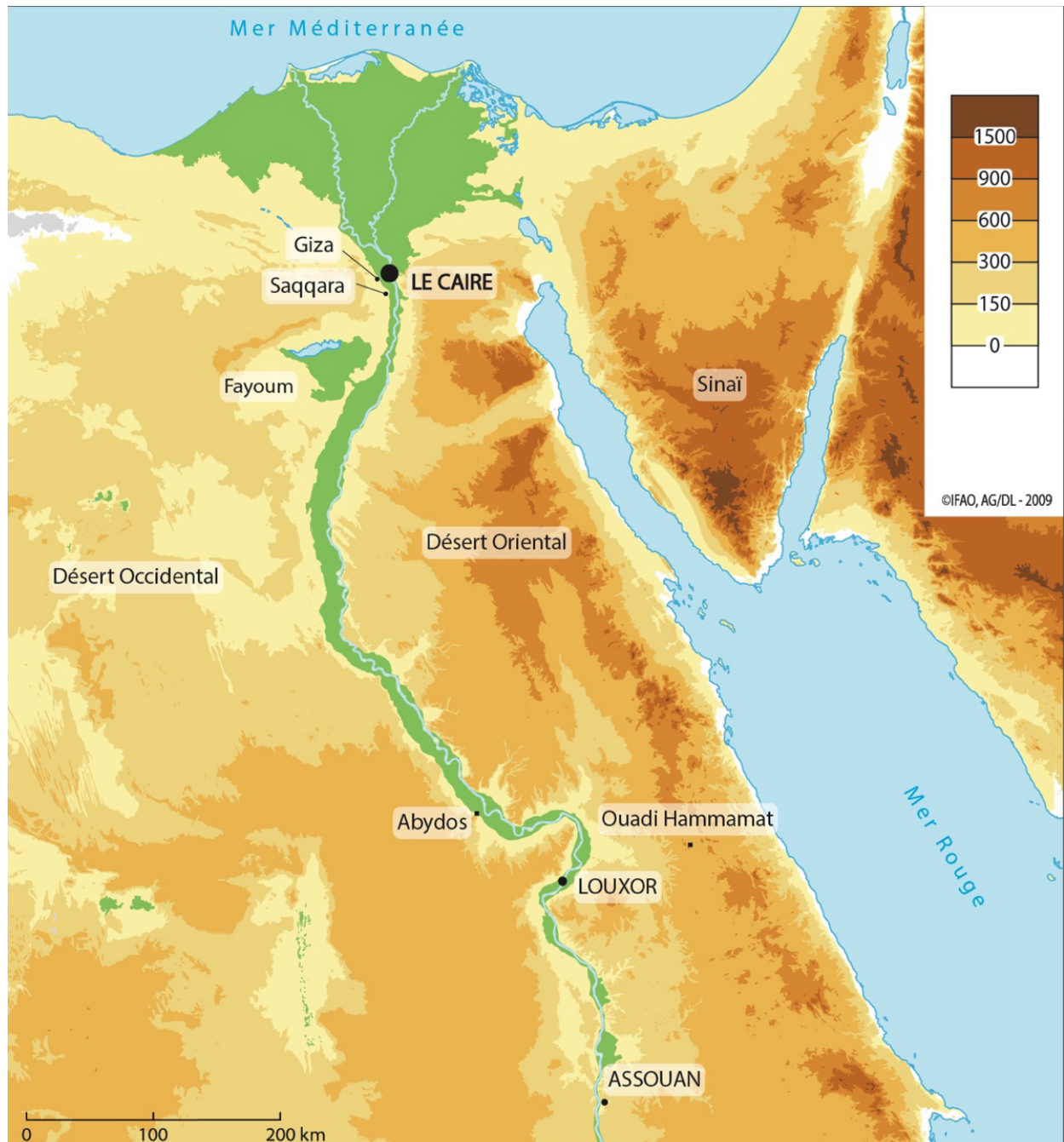


Fig. 10. Map of Egypt, showing the location of Wadi Hammamat. Modified after © IFAO, M. Gaber-D. Laisney.

At Wadi Hammamat, the primary greywacke deposit, archaeological and epigraphic evidence traces the history of mining exploitation at the site back to the 5th millennium BCE. Particularly at Bir el-Hammamat (the “well of Hammamat”), at the western entrance to the site, several rock panels covered with depictions of animals and hunters (fig. 11) are associated with extraction sites and workshops dating back to Naqada II,<sup>10</sup> precisely the period during which the two palettes from the FGA were manufactured (figs. 8 and 9). Interestingly, a geological study conducted on a group of palettes preserved at Cambridge confirmed their origin from the site of Wadi Hammamat.<sup>11</sup> Based on this study, it is reasonable to surmise that the two palettes from the FGA were also crafted in workshops at the same site.



Fig. 11. Predynastic petroglyphs at Bir el-Hammamat © Vincent Morel.

<sup>10</sup> BLOXAM, E., et al., “Investigating the predynastic origins of greywacke working in the Wadi Hammamat”, 21 (“workshop 1” et “workshop 2”).

<sup>11</sup> STEVENSON, A., “The material significance of predynastic and early dynastic palettes”, 151.



From the time of the first two Pharaonic dynasties onwards, the socio-political-economic imperative of acquiring such resources, far from the Nile Valley, was firmly intertwined with a religious dimension.<sup>12</sup> By establishing a connection with the mineral world, humans sought access to the chthonic realm of the gods. The extracted minerals themselves were conceived as divine creations, even considered part of the god's body.

Here, we encounter a peculiar notion that imbues stone vessels, such as the elegant greywacke example presented here, with a divine dimension that transcends the material aspects discussed above. Thus, owning such luxury items went beyond mere display; it represented a means of possessing objects capable of enduring for eternity and approaching as closely as possible to the realm of the gods.

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<sup>12</sup> LLOYD, A.B., "Expeditions to the Wadi Hammamat: context and concept"; Espinel, A.D., "Gods in the Red Land".



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## Exhibitions:

31.01.2014 - 27.04.2014, Corps et esprits. Regards croisés sur la Méditerranée antique, Geneva, Museum of art and history.