

An archery set from Dra Abu el-Naga

Even a looted burial can yield archaeological treasures: **David García** and **José M. Galán** describe a remarkable set of bows and arrows from an early Eighteenth Dynasty burial at the necropolis of Dra Abu el-Naga, on the West Bank of the Nile at Thebes. Extraordinarily well preserved, it reveals detailed information about the style and use of these antique weapons.

The Spanish archaeological mission has been working in the central area of the necropolis of Dra Abu el-Naga, around the early Eighteenth Dynasty tomb-chapels of Djehuty and Hery (TT 11–12), since January 2002. The first seasons concentrated on the inner part of the monument and on their open courtyards. Since 2011 the excavations have focused on areas south-west of the open courtyard of Djehuty's tomb-chapel, bringing to light mud-brick structures and burials, for the most part dating to the Seventeenth or early Eighteenth Dynasties, which were covered by the modern village that was demolished in 2006/07.

Two adjoining shafts laid out in parallel were recorded during the 2015 season. Ancient robbers had already broken down the separating wall between the shafts and also connected them through two large holes with earlier rock-cut tombs located at either side. One of the shafts was left unfinished when the stonemasons ran into the burial chamber of the neighbouring shaft. It is uncertain if the

former was ever used. The other shaft measures 2.70 m by 1.14 m, and is 5.20 m deep. The burial chamber opens at the north-west end, measuring 2.50 m by 0.97 m and 2 m in height. The tomb was robbed, and both the shaft and burial chamber were filled with debris, alternating sandy layers with other material, including large stones. Mixed within the debris were mummified human remains and fragments of funerary equipment, such as coffin fragments, shabtis, amulets, cartonnage and linen, mostly dating to the Seventeenth and Eighteenth Dynasties.

However, despite severe looting, an ensemble of two self bows and 20 arrows (see images below and opposite page) were found in a good state of preservation, lying on the ground of the burial chamber along the north-east wall, under the debris mentioned above. Luckily, the robbers did not notice the archery set when removing the coffin and funerary equipment, probably because it would have been covered by dust and the erosion of the rough rock wall above it.



Archery set as found, after removing the debris that filled the chamber.



Burial chamber with the archery set lying on the floor along the north-east wall.

The two bows still preserve a stretch of twisted gut bowstring fastened to one of the tips. The string was looped around the tip eleven times, and the opposite tip has a notch to attach the bowstring. It was common to leave the bow untensioned until the moment it was used to keep the bow's tension and avoid wood deformation.

The two bows are round in section, double curved and with rounded tips. The different

tones of the wood used indicates that they were made from different species. The darker example has a small splintered area in the centre, by which the species could be identified as sidder wood (*Ziziphus* sp.). It is 174 cm long, with a diameter of 2.4 cm at grip and 1.2 cm at the tips. The other is of a lighter tone, but the species is yet to be identified. It is 169 cm long, with a diameter of 2.3 cm at grip and 1.4 cm at the tips.

Detail of the bowstring fastened to one of the rounded tips of the self bow.



Composite image showing the nock cut directly into the reed and strengthened at the top by a short tang (above) and the junction between the main part of the shaft and the footing, similarly strengthened by a tang (below).



A bundle of seven arrows was found wrapped inside a linen cloth, 26.5 cm by 21.3 cm, of the type defined as 'towel', decorated with a geometric pattern of framed zigzags, embossed, made from different types of threads and without selvedge on any of the four sides (image on the next page). Inside the bundle was a second linen, 59.5 cm by 34 cm, of a finer quality, wrapping around a calcite vase, 6.9 cm in height with a maximum diameter of 6.4 cm

(page 34), that contained kohl (galena powder).

The arrows have an average length of 72 cm. They are all footed arrows, with cylindrical, composite shafts made of reeds of around 54 cm in length and 0.7 cm in diameter, and hardwood footings of 0.5 cm diameter, most probably acacia, spliced into the reed, with the foreshafts projecting from the reeds around 18 cm. The junctions of the main part of the shafts and the anterior end are bound with short tangs. The nocks, designed

to receive the bowstring before shooting, are carefully carved directly into the reeds and strengthened at the top by a short tang.

The arrowheads were originally 'narrow lunate barbed' (see below), formed by three small microlith flints: two triangular barbs attached to both sides and a third trapezoid, transverse tip. The end of the footing has three notches to insert the flints and keep them in position. Arabic gum (acacia resin) was then used to reinforce the joint. However, only three arrows preserve all three flints in place. Out of 20 arrows, only two arrowheads were not made of flint, but had only the wooden footing

tip sharpened. The shaftment of the arrows is featherless, although several preserve a thin and elongated trace of gum that could have been used to fix a vane of feathers.

The archaeological context helps to date the archery set to the end of the Seventeenth Dynasty, c. 1570 BC. It is actually the second find of a set of bows and arrows by the Spanish mission at the site. In 2008 a trench was opened in the middle of the courtyard of Djehuty's tomb-chapel (TT 11), and 1 m below floor level an intact burial of the Eleventh Dynasty was found (see EA 35). A red-inscribed coffin was pushed inside a rock recess



Detail of the 'towel' wrapping a bundle of seven arrows and a calcite vase.



Detail of a 'narrow lunate barbed' arrowhead.



and partially buried in sand. Next to the head end, five arrows were found intentionally broken in half. They were about 82 cm long and fletched, with three vanes of feathers. The footing was made of acacia wood around 20.5 cm long and 0.5 cm in diameter, projecting from the reed around 13 cm. Inside the coffin were three curved staves and two self bows of 152 and 162 cm respectively, one of acacia and the other of tamarisk. They are circular in section, double curved with rounded tips. They both have the gut bowstring tied to one of the tips, looping around it at least nine times.

Further archery sets are known from ancient Egypt: in the area of Deir el-Bahari, the Metropolitan Museum of Art found a number of bows and arrows of similar type in the 'tomb

of soldiers of Nebhepetra Montuhotep' in 1923. A similar 'towel' was also found there, and two more in tomb No. 813 excavated in 1930-31. In tomb No. 812 an archery tackle was found, which included a small calcite vase containing traces of kohl. Finally, in the British Museum there is a group of five self bows made of sidder wood, the same species we identified in one of our bows.

This find illustrates that the basic archery set (see image below) was composed of two bows (most of the time of two different woods), arrows, a 'towel' and a small calcite vase containing kohl. The documentation of the archaeological context, although disturbed, is also a significant contribution to the study of archery sets in ancient Egypt.

Top left: The calcite vase was wrapped in a second linen cloth of finer quality.

Top right: The calcite vase contained traces of kohl.



The archery set including two bows, 20 arrows, two linen cloths and a calcite vase.

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All Photos courtesy of Latova/Proyecto Djehty