

Contextualising Metal-Detected Discoveries:
The Staffordshire Anglo-Saxon Hoard



Catalogue no. 505 Gold mount from the tip of a
hilt-guard with garnet cloisonné decoration



NEWSLETTER

JUNE 30, 2016

Hello! I am back once more as editor of this, probably the final, Staffordshire Hoard Newsletter. The Newsletter is somewhat shorter than previously, as people move away from cataloguing and analysis and set their sights on the final publication.

Here in Birmingham, the Barber Institute has an exhibition of coin hoards of different periods, and the exhibition has been accompanied by a series of lectures (now ended).

Uncovering Hoards

Buried treasure – and the excitement of discovering it – lies at the heart of this fascinating exhibition exploring coin hoards.

The Barber Institute's collection contains coins from no fewer than 48 hoards, of which eight will be uncovered here. These include two caches unearthed in Britain: the Dorchester Hoard (pictured right), dug up during building work at the town's Marks and Spencer; and the Appleford Hoard, unearthed by a farmer ploughing his field one new year's eve.

Telling the stories of their deposition and their discovery, the exhibition will open a mysterious doorway into Roman, Byzantine and Turkman worlds. It will prompt some intriguing questions: Who buried them and why? Who found them and how? What can these discoveries tell us about people who lived centuries ago? And what can we do as modern people to preserve this heritage?

The exhibition runs until February 26, 2017 - a must see for anyone with an interest in hoards!

I have thoroughly enjoyed editing the newsletter and feel privileged to have done so. It is always good to be one of the first to hear about a new discovery, new insights or new techniques. The project has come so far and it is heartening to see an end in sight, when the full range of information



Well, I'll be ... just look at those prints! Those guys must have been fearsome worriers in their time.

and images will be available to the public at large. The success of the project has been due to the dedication of all who have worked on it, in whatever capacity, from back-room to front-of-house and to Hilary, who has managed to steer a heavily laden ship towards a safe harbour.

Thanks to all the contributors over the years.

Stephanie Rátkai

NOTES FROM THE PROJECT MANAGER

When you read this we will be in the final year of the project, which is a splendid thought. Unsurprisingly we have had a busy six months since the last Newsletter. The most important event was that the Owners of the Hoard informed us in February that they had raised the money we needed to plug some of the gaps in our budget. Amongst the things this will enable us to complete is the survey of what has been found in the local area around the Hoard find spot. This will be conducted by Jon Goodwin who is the City Archaeologist for Stoke on Trent. He will be conducting a desktop survey of the published and unpublished sources of what has been found relating to the fifth to seventh centuries. His final report will form part of the digital section of the publication, and will undoubtedly be a useful resource for people working in the area more widely. We have also been able to commission an essay from Peter Guest who will consider hoarding practices in fourth and fifth century Britain. So we will now be able to give the reader of the final publication a well-rounded

background against which the deposition of the Hoard needs to be viewed.

Chris and George have continued to plough through the material creating the final catalogue which is now finished in draft form. This is a happy and major milestone. Our copy editor Val Kinsler is now diligently scouring the first part for any mistakes. For the first time we have a much better idea of how many things there are in the Hoard rather than how many pieces. We shall have about 700 catalogue entries. This is four more than we expected to have as, during the recent work on the silver sheet fragments, the conservators discovered parts of two more hilt plates and have been able to reconstruct two mysterious silver gilt brackets. Kayleigh tells us about them later in the Newsletter.

Drafts and other reports continue to come in. Professor Henry Chapman of Birmingham University has checked all the survey data from the two campaigns of recovery conducted Birmingham Archaeology and Warwickshire Archaeology to make sure they are compatible. Professor Marcos Martinon-Torres of UCL has conducted further investigations into the mystery green inlay in some of the cloisonné pieces. It continues to defy identification, but at least we know some of the things it isn't.

The photography is proceeding. Aleks and Lucy have provided a piece for this Newsletter showing how they are tackling it.

The sad news I have to tell you is that we will be saying goodbye to the conservation team in August. Pieta and Kayleigh will be leaving the Birmingham Museum and Art Gallery, whilst Lizzie will be returning to her normal conservation role there. All of the team are very sad to see them go, and I wish to say thank-you for all their sterling and excellent work. Pieta arrived early in 2013 whilst the project was in Stage 1. It is not too much to say that the success of the project will ultimately be seen to have relied very much on her role as conservation co-ordinator, and the way she has facilitated and advanced the research over the past four years. Kayleigh and Lizzie joined us at the beginning of Stage 2, and you will see the result of their work in all of the Newsletters of this stage, including

this one. We wish them all well in their future careers, and look forward to seeing them at the party we will undoubtedly be having when the project is published.

Hilary Cool

Publications

Journal publications continue to emerge from the research project in advance of final publication. Andrew Meek of the Department of Conservation and Scientific Research at the British Museum has just published an article about the analysis of the glass inlays from the Staffordshire Hoard. This work was part of the Stage 1 research. The conservation team have also published an article about their work on the Staffordshire hoard. An article on the gold analysis carried out in Stage 1 has been accepted for publication in the *Journal of Archaeological Science*, and should appear soon.

Details of all new publications like this are put on the news section of the front page of the Barbican web site as they are published (www.barbicanra.co.uk). Links to find the articles on the web are also placed there.

Butterworth, J., Fregni, G., Fuller, K. and Greaves, P. 2016. 'The importance of multidisciplinary work within archaeological conservation projects: assembly of the Staffordshire Hoard die-impressed sheets', *Journal of the Institute of Conservation* 39, 29-43.

Meek, A. 2016. 'Ion beam analysis of glass inlays from the Staffordshire Anglo-Saxon Hoard', *Journal of Archaeological Science: Reports* 7, 324-9.



STAFFORDSHIRE HOARD CATALOGUE PHOTOGRAPHY

Cotswold Archaeology has been photographing the Hoard piece by piece since September 2015, it has proved to be an absolutely fascinating project with many new challenges for the photography team, Lucy Martin and Aleks

Osinska. The final product that we will produce face details, construction and destruction from all



Figure 1: Images showing multiple faces and details of a single pommel cap

is a complete visual record of every object within the hoard. This will show their form, colour, sur-



Figure 2: view through the camera

angles (**Figure 1**); we need to make sure that we have front, back, sides, top and bottom for each object.

The process involved in doing this is very simple in principal but in practice can be very tricky to get right.

Firstly, the object must be propped up to show the correct view to the camera (**Figure 2**). With objects so distorted from the 7th century damage this can be challenging. It is very often achieved with cradles constructed from natural thorns, which the conservators use in their processes, embedded into a plasterzote foam base.

Multiple images must be taken of the same

object face, either if props are obscuring part of the surface or if the object cannot be captured in the focal field completely in a single exposure. In such cases we use a technique known as focus stacking, which combines multiple images to extract only the portions of each image that is in sharp focus, creating a single image in which the whole depth of an object is captured sharply (**Figure 3**).

Once we have done this process with all views of the object we can combine them digitally to create a standard set of views showing faces around the object at 90 degrees rotation to each other (**Figure 4**).

For the final publication the images need to have a white background (**Figure 5**), this is created by removing all background distractions such as mounts and any coloured backgrounds.

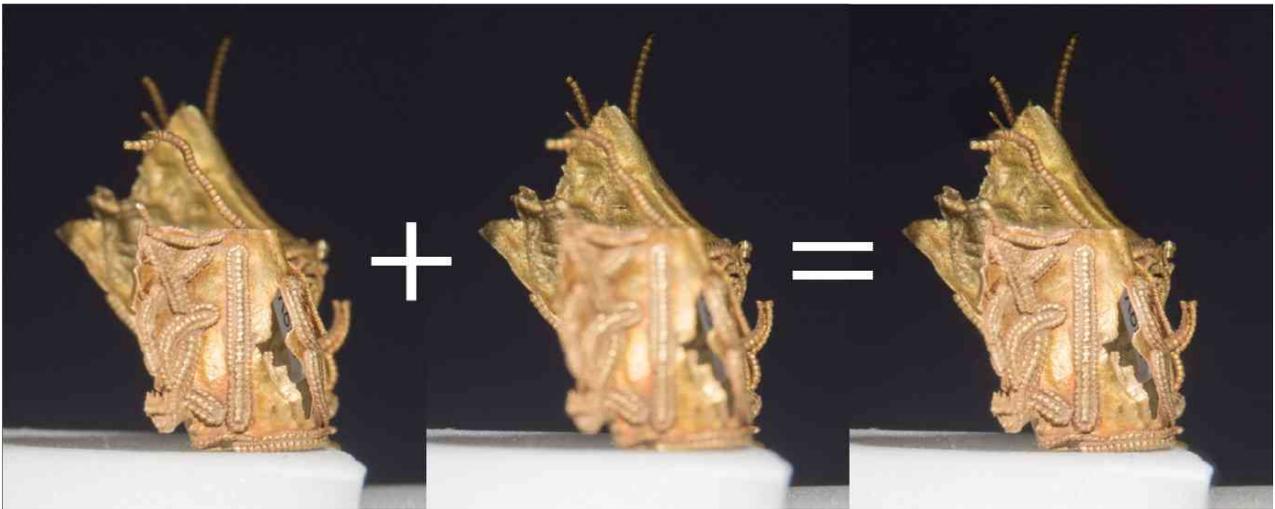


Figure 3: Stacking multiple shots together to produce an in focus image.



Figure 4: all angles of K698



Figure 5: Final image of K698 ready for publication.

All practical efforts are made to reduce geometric distortion, so the final images can be used to study the objects without seeing the original. This process is time consuming but extremely rewarding for us as photographers.

Established in 1989, Cotswold Archaeology has grown to become one of the top suppliers of archaeological services in the UK today. From our offices in Cirencester, Milton Keynes, Andover and Exeter we provide bespoke archaeological and heritage solutions for a diverse range of projects from major infrastructure to small-scale housing and renewable energy projects. Our outstanding reputation is based on working closely with clients to effectively deliver high quality archaeological projects on time and on budget. We are also committed to outreach – publishing details of important archaeological findings and adding to the wider circle of information available about our heritage in the UK.

Lucy Martin and Aleks Osinska

DISCOVERY OF A NEW OBJECT

One of the most surprising things that has occurred during the 2016 conservation work is the reassembly of an entirely new object. Early in 2016 we were tasked with making sense of a large collection of fragments of gilded silver sheet that had not yet been looked at. You can see below some of the sheet which is either flat or moulded (**Figure 1**). There was no expectation that the dozens of small fragments would form any type of object at all.

On inspection of the fragments it was clear that the surface of the gilded silver sheet appears different to many other items in the hoard. It either has a bright but tarnished appearance or a strange iridescent staining on the surface (**Figure 2**). The unusual iridescent phenomenon is the likely result of gold, silver,

copper and sulphur corrosion products forming or being deposited onto the gilt surface.

Over a two month period, the conservation team and conservation volunteer Sue Hull worked tirelessly to assess, document and reassemble various elements of this new object as seen in the



Figure 1: Fragments of the two types of sheet in the assemblage



Figure 2: Iridescent staining

two main sections below (**Figures 3a and 3b**). It forms a bracket or base; it is missing its core, which was probably made of wood and was either removed or has decayed over time.



Figure 3a: More complete section made up of 45 fragments



Figure 3b: The smaller reconstructed section

Work to understand how this object fits into the Staffordshire Hoard is ongoing and an interpretation will be given by Chris Fern in the final catalogue. For the conservation team, it has been an exciting opportunity to piece together an object not seen for 1400 years.

Kayleigh Fuller

TOURING EXHIBITION

It's been a busy six months for the Staffordshire Hoard museum teams, preparing for a touring exhibition which opened at the Royal Armouries, Leeds at the end of May. The exhibition focuses entirely on the weapon fittings in the hoard and showcases some of the objects that have been revealed by the research project, including the large, silver, double-ring pommels, reassembled by the conservation team, and pairs and suites of fittings identified by Chris Fern. The Royal Armouries have also placed the 7th-century Wollaston helmet group on display, so the exhibition is a unique opportunity to see these collections side by side.

'Warrior Treasures: Saxon Gold from the Staffordshire Hoard' is at the Royal Armouries, Leeds until early October, and then at Bristol Museum & Art Gallery from October 2016 until April 2017.

Jenni Butterworth

'ASSEMBLY' MARKS

Recently, I have been researching the strange, roughly incised marks found on some objects, which take the form of lines and crosses. These mainly occur on reverses or interiors, where they would have been hidden from view when fitted. A number are recorded on pairs and sets of objects, or on objects with complex parts, suggesting they possibly relate to assembly. The most complex programme is on a pair of large gold strip-mounts (catalogue nos. 558–559), decorated with garnet cloisonné and inlaid filigree serpent panels (Figure 1). The markings are on the reverses of the rectangular filigree mounts. For one, mount lines were used,



Figure 1: Part of mount 558. It was found missing most of its small gold filigree panels decorated with serpents. These have now been identified and reattached, partly on the basis of the programme of assembly marks used in the original manufacture. Photo Guy Evans/Barbican Research Associates.

for the other diagonal crosses (Figure 2).

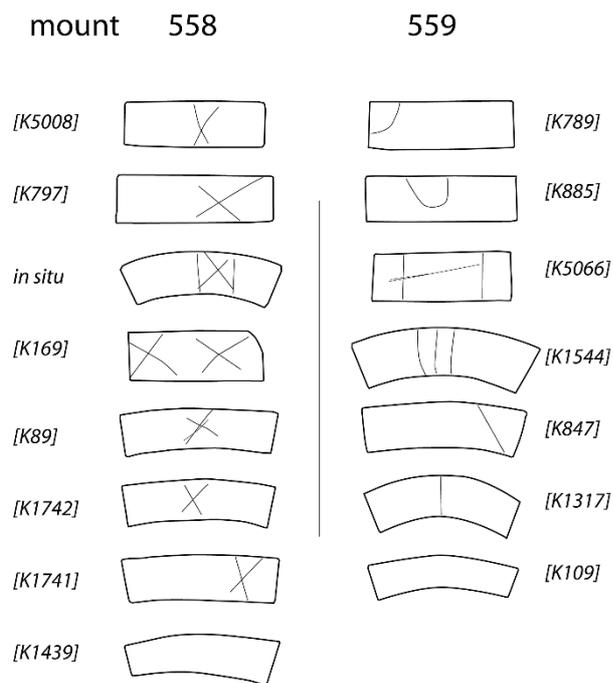


Figure 2 The marks used on the reverses of the gold filigree panels from mounts 558 and 559. One mount used lines, the other diagonal crosses. (Drawing Chris Fern)

Assembly marks have been identified previously on artefacts of the period, but not in Anglo-Saxon manufacture, and not before the 8th century.

On the famous Derrynaflan, Co. Tipperary, paten a range of letters was used, marking a literate craftsman, that served to locate its many separate parts in final assembly (Brown 1993).

Only a small number of Anglo-Saxon artefacts from elsewhere bear markings similar to those in the collection. The famous helmet from Coppergate, York, bears a sketched boxed-cross mark, one side of its iron cap, but it does not appear related to assembly (Tweddle 1992, 947, figs 407, 412), and a brooch from Harford Farm, Norfolk, includes crosses in the incised decoration on its reverse (Penn 2000, fig 84). Cross marks also occur on this brooch within a runic inscription, the form of writing formed of carved line elements used in Northwestern Europe in the period. Whilst a runic meaning for the marks in the hoard seems ultimately unconvincing, in choosing to use marks related to the runic alphabet, it is possible the craftsmen were drawing on a common system.

Chris Fern

Brown, M., 1993 'Paten and Purpose', *The Derrynaflan Paten Inscriptions*, in M. Spearman and J. Higgitt (eds), *The Age of Migrating Ideas. Early Medieval Art in Northern Britain and Ireland*, Alan Sutton Publishing, Stroud

Penn, K., 2000 *Norwich Southern Bypass, Part II: Anglo-Saxon cemetery at Harford Farm, Caistor St Edmund, East Anglian Archaeology 92, Gressenhall*

Tweddle, D., 1992 *The Anglian Helmet from Coppergate, The Archaeology of York, vol.17, Council of British Archaeology, London*



The Staffordshire Hoard Touring Exhibition (see Jenni Butterworth, above)