X-rays reveal secrets of Kent Anglo-Saxon graves

Gold and silver decorations on iron ‘grave goods’ found in two Anglo-Saxon cemeteries in east Kent more than 140 years ago are being revealed by X-ray and XRF (X-ray fluorescence) spectrometry analysis.

The cemeteries, on land at Sarre and Patrixbourne owned by Lord Conyngham, were among the first and most important sites to be investigated by the Kent Archaeological Society, founded in 1857.

In 1863-65 John Brent excavated 272 graves at Sarre. Two years later he and other KAS members, supervised by Godfrey Faussett, carried out a dig at a newly-discovered cemetery at Bifrons, Lord Conyngham’s estate at Patrixbourne.

While the KAS team conducted its investigations, Lord Conyngham and his gamekeeper opened up some of the graves and kept their ‘finds’ for his lordship’s private collection of Anglo-Saxon objects!

Most of the items from Sarre and Bifrons - brooches, jewellery, crystal balls, beads and glass as well as iron artefacts - were placed in the KAS collection at Maidstone Museum. For more than 100 years they have been studied by eminent scholars and featured in academic publications, but it had been impossible to inspect the iron artefacts thoroughly, due to poor conservation at the time they were discovered and subsequent corrosion.

Until the 1960s archaeologists were not even able to say which cemetery each object came from, because the original identifying labels had become illegible. Eventually Sonia Chadwick Hawkes, an authority on early Anglo-Saxon archaeology, was able to assign most of the objects to either Sarre or Bifrons.

Now, new insights into the design and construction of some of the iron artefacts are being achieved by a team led by Dana Goodburn-Brown at Sittingbourne-based Conservation Science Investigations (CSI).

‘It’s early days yet,’ said Pernille Richards of the KAS, who is liaising with CSI, ‘but X-ray and XRF analysis have already brought new information to light. A gold inlay has been revealed on a buckle and we have seen four squares of gold criss-crossed inlaid wires running along the back of the blade of a knife.

‘XRF analysis has shown that the white metal plating on a stud is actually silver.

‘We also have a mystery object, a strange looking item with a slightly trumpet-shaped tubular projection, which awaits identification.’

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Note to editor: JPEGs of the images below can be supplied by Paul Tritton (contact details at top of page).
Jihyun Kwon (centre) of Conservation Science Investigations and volunteers working on the ‘grave goods’ from the Anglo-Saxon cemeteries at Sarre and Bifrons.

Some of the ‘grave goods’ from the Anglo-Saxon cemeteries at Sarre and Bifrons. Objects AS30 and 202.147 are respectively the silver-coated buckle and the gold-inlaid knife. KAS.TEMP.202.145 is the ‘mystery object’.

Four conserved objects from the Anglo-Saxon cemeteries, pictured with a £1 coin for comparison.